

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

**NTP Study Number:** C10034  
**Lock Date:** 08/16/2017  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** 09/29/2017

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST	050	072	075	078	077	077	077	054	062	060	057	055	055	066	077	066	055	055	072	077	044	066	066	055	077	males (cont...)
	ANIMAL ID	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	

ALIMENTARY SYSTEM

Esophagus	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	A	A		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+
Intestine Small, Ileum	A	A		+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	A	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																										
Basophilic Focus																										
Clear Cell Focus																										
Cyst		X					X																			
Degeneration, Cystic			1						3			2	1		2				1	1	1		1	1		2
Fatty Change				2																						
Hepatodiaphragmatic Nodule				X			X							X												
Infiltration Cellular, Mononuclear Cell		1		2	2	2	2		1		1	2	2	1	1	1	1	1	1		2		1		2	1
Inflammation, Chronic Active									1																	
Mixed Cell Focus																										
Tension Lipidosis																										
Vacuolization Cytoplasmic		3										2	2							2	1	1		1		1
Bile Duct, Hyperplasia				2			2					3	1		1	2				2	2	1		2	1	1
Biliary Tract, Cyst																							X			
Biliary Tract, Fibrosis				2	1				2			2	1		1											1
Hepatocyte, Necrosis								4	2																	
Oval Cell, Hyperplasia		1			2	1																	1			
Mesentery																										+
Fat, Necrosis																										4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	males (cont...)
	5	7	7	7	7	7	7	5	6	0	5	5	5	6	7	6	5	5	7	7	4	6	6	5	7		
	5	2	2	2	2	2	2	4	9	7	8	7	6	5	2	1	2	9	2	8	8	6	4	7	2	0	
	0	7	5	8	7	7	7	4	2	3	3	9	7	6	8	3	1	6	8	8	8	8	8	8	8	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	1	2	2	3	3	4	4	5	5	7	8	8	9	9	0	0	1	1	1	1	3	3	4	4	1	
	1	2	1	2	1	2	1	2	1	2	1	2	2	1	2	1	2	1	2	1	2	1	3	2	1	1	

Oral Mucosa																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basophilic Focus																										X
Infiltration Cellular, Lymphocyte		2	1	1	2	1	2		3		3	2		3	3	1	2	1		2		3		2	2	
Inflammation, Chronic Active															2											
Lipomatosis		3					3							4					3							
Pigmentation	1	1	2	1					1	1	2	2		2	1	1	1		1		1		2	1		
Acinus, Degeneration	2	3	2	2	2	2	4		4		4	4		4	4	1	2	1	1	3	2	3		4	4	
Artery, Fibrosis																									4	
Artery, Inflammation, Chronic Active																									2	
Artery, Mineralization																										
Artery, Pigmentation																									3	
Stomach, Forestomach	+		+			+		+	+	+	+	+	+	+	+	+	+			+	+	+	+	+		
Hyperplasia, Basal Cell																										
Inflammation, Chronic Active																										
Mineralization																										
Ulcer																										
Epithelium, Hyperplasia																										
Stomach, Glandular	+		+			+		+	+	+	+	+	+	+	+	+	+			A	+	A	+	+		
Edema																										
Mineralization																										
Necrosis																										
Epithelium, Hyperplasia																										

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
--------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

<b>SPRAGUE DAWLEY (NCTR) RATS MALE</b>	DAY ON TEST	050	072	075	078	077	077	077	054	069	007	058	057	056	066	078	063	052	059	072	078	046	064	067	058	072	078
	ANIMAL ID	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026

males (cont...)

Mineralization

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	3	3	3	2	2	1	2	1	2		2	2	1	1	2	2	2	1	2	2		1	1	2	2		
Mineralization																											
Atrium, Dilatation	4																										
Ventricle, Dilatation	4																										

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																												
Atrophy					4																							
Degeneration, Cystic		2				2	2																					
Hyperplasia														1										1	2			
Hypertrophy													2							1								
Metaplasia, Osseous																												
Necrosis																												
Vacuolization Cytoplasmic	2								3	1			1	2		3		2					1	2				
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																												
Hyperplasia		2								1			1															
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																										3		4
Parathyroid Gland	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia								2			2		2				2					1	2				1	

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST																				ANIMAL ID	males (cont...)				
	050	072	075	078	077	077	077	054	062	063	053	053	055	056	067	066	051	055	072	072			046	064	066	057
	000	000	000	000	000	000	000	000	000	000	002	002	002	002	002	002	002	002	002	002	004	004	004	004	004	004
	001	001	002	003	003	004	004	005	005	007	008	008	009	009	009	009	009	009	009	009	001	003	003	003	003	005

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+
Angiectasis		4	4			4			4																
Atrophy					4																				
Hemorrhage					2																				
Pigmentation					4																				
Pars Distalis, Cyst												X	X					X					X		
Pars Distalis, Cyst Multilocular																									
Pars Distalis, Hyperplasia				3					2					3		3				2					3
Pars Distalis, Hypertrophy																								2	
Pars Intermedia, Cyst														X											
Thyroid Gland	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Ultimobranchial Cyst						X								X	X										
C-cell, Hyperplasia		1		3			1						1		2										
Follicular Cell, Hyperplasia																									

GENERAL BODY SYSTEM

Tissue NOS	+																								
Hemorrhage																									4

GENITAL SYSTEM

Bulbourethral Gland																									
Coagulating Gland	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy					4																				
Cyst, Mucinous								X																	
Degeneration, Cystic																									
Fibrosis													4												3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST																								males (cont...)	
	050	072	075	078	077	077	077	077	054	062	063	057	053	055	056	066	078	063	051	056	072	078	048	064		067
ANIMAL ID	00011	00022	00031	00032	00033	00034	00041	00042	00051	00052	00057	00061	00062	00068	00071	00072	00079	00081	00082	00083	00084	00091	00092	00093	00094	00095
Inflammation, Suppurative								4																		
Inflammation, Chronic Active							3																			
Lumen, Dilatation														3	4											
Epididymis	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Exfoliated Germ Cell		3			1		2													2			1			
Hypospermia			4		4				4					4								4				
Infiltration Cellular, Lymphocyte			1						2																	1
Epithelium, Degeneration																										
Fat Pad, Epididymal									+																	
Necrosis									4																	
Preputial Gland		+	+			+	+													+	+					+
Abscess																					4					
Atrophy						3																			3	
Hyperkeratosis		4					4																			
Inflammation, Suppurative			4			2	4																			
Duct, Dilatation		4	4				4													4						
Prostate, Dorsal/lateral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy					4																					
Cyst, Mucinous															X											
Fibrosis				2											2						2					
Infiltration Cellular, Lymphocyte	2		1	2	2	1	2		1		1	1		1	1		1		1	2	1	2	1	3	2	1
Inflammation, Suppurative	2	2	2	2	2	1	3	4	2		2	2	1	1	2	2	2	1	2	2	1	3	2	2	2	2
Prostate, Ventral Lobe	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy					4																					3
Fibrosis	2				4	2			4											2				4		

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST																				ANIMAL ID	males (cont...)			
	050	072	075	078	077	077	077	054	069	067	053	053	055	056	067	066	051	055	072	077			044	066	066
Infiltration Cellular, Lymphocyte	3			3	2	1		4	2	1								1	1	3		4		1	1
Inflammation, Suppurative	3			2				4	4			1					1					4	4		
Mineralization				3																			4		
Polyarteritis								2																	
Epithelium, Hyperplasia			1	2		2	2							3						2					
Seminal Vesicle	A	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Atrophy				4																					
Fibrosis													3												
Inflammation, Suppurative								4																	
Epithelium, Hyperplasia															4					3					
Lumen, Dilatation																									
Testes	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyarteritis		2	4		1		4		4															4	
Seminiferous Tubule, Degeneration		1	4	1	4	2	2	1	4		1	1	1	4				1	3	1		3	4		1

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+
Hypocellularity						3	3														3				3
Necrosis																									
Myeloid Cell, Hyperplasia								2										4						4	
Lymph Node			+	+		+	+							+			+						+		
Axillary, Hyperplasia, Lymphoid																									
Axillary, Infiltration Cellular, Plasma Cell																									
Lumbar, Degeneration, Cystic																							3		
Lumbar, Hyperplasia, Lymphoid							3																3		
Lumbar, Infiltration Cellular, Plasma Cell							4						4										3		

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST																				ANIMAL ID	males (cont...)				
	050	072	075	078	077	077	077	054	062	063	053	053	055	066	078	063	051	055	072	078			046	064	067	058
Renal, Degeneration, Cystic			2	4														2								4
Renal, Hemorrhage			4																							
Renal, Hyperplasia, Lymphoid			2																							
Renal, Infiltration Cellular, Plasma Cell																		4								
Renal, Pigmentation																										2
Lymph Node, Mandibular Degeneration, Cystic	+													+												+
Hyperplasia, Lymphoid			3															3								2
Infiltration Cellular, Plasma Cell			4															4								
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	
Hematopoietic Cell Proliferation		2		1			1	3	3		2					1				3						
Hyperplasia, Lymphoid																										
Mineralization																										
Necrosis																										
Pigmentation	2	1		2	4	4	2		1		2	3				2	1	1	2	1					2	
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy	4	4	4	4	4	4	4	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Hemorrhage											2															

**INTEGUMENTARY SYSTEM**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Galactocele																									X
Hyperplasia, Lobular																									
Alveolus, Degeneration			3		3	3					3	4		4	3	4	4		3	4	4		3	4	3
Alveolus, Dilatation							2	2																	2
Duct, Dilatation	2	2	3	2			3	2		2											2				2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

SPRAGUE DAWLEY (NCTR) RATS MALE F1 Veh. Ctrl M	DAY ON TEST																				ANIMAL ID	males (cont...)				
	050	072	075	078	077	077	077	077	054	062	063	053	053	055	057	066	078	063	051	056			072	048	064	068
	000	000	000	000	000	000	000	000	000	000	002	002	002	002	002	002	002	002	002	002	004	004	004	004	004	004
	001	001	002	003	003	004	004	005	005	007	008	008	009	009	009	009	009	009	009	009	009	009	009	009	009	009
	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002	001	002

Skin																											
Abscess																											
Cyst Epithelial Inclusion																											
Inflammation, Granulomatous Epithelium, Foot, Hyperplasia																											
Foot, Edema																											
Foot, Fibrosis																											
Foot, Inflammation, Chronic Active																											
Foot, Necrosis																											
Foot, Ulcer																											

MUSCULOSKELETAL SYSTEM

Bone																											
Bone, Femur																											
Fibrous Osteodystrophy																											
Skeletal Muscle																											

NERVOUS SYSTEM

Brain, Brain Stem																											
Compression																											
Brain, Cerebellum																											
Hemorrhage																											
Brain, Cerebrum																											
Gliosis																											

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

DAY ON TEST		05	07	07	07	07	07	07	05	06	00	05	05	05	06	07	06	05	05	07	07	04	06	06	05	07
ANIMAL ID		00	00	00	00	00	00	00	00	00	02	02	02	02	02	02	02	02	02	02	02	04	04	04	04	04
<b>SPRAGUE DAWLEY (NCTR)</b>	<b>RATS MALE</b>	50	72	72	72	72	72	74	92	73	33	79	67	56	68	63	11	96	78	78	68	64	68	67	88	
<b>F1 Veh. Ctrl M</b>		00	00	00	00	00	00	00	00	00	02	02	02	02	02	02	02	02	02	02	02	04	04	04	04	04
		00	00	00	00	00	00	00	00	00	01	01	01	01	01	01	02	02	02	02	03	03	03	03	03	
		11	12	22	33	44	24	55	57	71	81	88	99	99	00	11	22	11	22	11	22	33	44	44	55	
		11	22	12	22	31	32	41	42	51	52	71	82	81	92	91	21	21	12	21	22	31	32	41	42	

males  
(cont...)

Hemorrhage  
Mineralization  
Necrosis  
Ventricle, Dilatation

1 2 1

Nerve Trigeminal  
Axon, Degeneration

+ +

Peripheral Nerve, Sciatic  
Axon, Degeneration

+ +

Peripheral Nerve, Tibial  
Axon, Degeneration

+ +

Spinal Cord, Cervical

+ +

Spinal Cord, Lumbar  
Axon, Degeneration

+ +

Spinal Cord, Thoracic

+ +

**RESPIRATORY SYSTEM**

Lung  
Congestion  
Foreign Body  
Infiltration Cellular, Histiocyte  
Inflammation, Granulomatous  
Inflammation, Chronic  
Inflammation, Chronic Active

+  
4  
X  
3 3  
2  
4  
3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST | 050   | 072   | 075   | 078   | 077   | 077   | 077   | 054   | 069   | 067   | 053   | 053   | 055   | 056   | 067   | 066   | 051   | 055   | 072   | 077   | 046   | 064   | 067   | 058   | 072   | 078   | males<br>(cont...) |
|  | ANIMAL ID   | 00011 | 00012 | 00021 | 00022 | 00033 | 00034 | 00041 | 00042 | 00051 | 00052 | 00061 | 00062 | 00071 | 00072 | 00081 | 00082 | 00091 | 00092 | 00101 | 00102 | 00111 | 00112 | 00121 | 00122 | 00131 | 00132 |                    |

Metaplasia, Osseous  
Necrosis

|  |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
|--|---|---|--|---|---|---|---|---|---|---|---|--|---|---|---|---|--|--|---|---|---|---|---|--|--|--|--|
| Nose   | + | + |  | + | + | + | A | + | + | + | + |  | + | + | + |   |  |  |   | + | + | A | + |  |  |  |  |
| Autolysis  |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   | 4 |   |  |  |  |  |
| Fibrous Osteodystrophy                                 |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Foreign Body   |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Inflammation, Suppurative                              |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Inflammation, Chronic Active                           |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |   |   |  |   |   |   | 4 |   |   |   |   |  | 3 |   |   | 1 |  |  |   |   |   |   |   |  |  |  |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |   |   |  |   |   |   |   |   |   |   |   |  | 2 |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Respiratory Epithelium, Hyperplasia                    |   |   |  |   |   |   |   |   |   |   |   |  | 2 |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |   |   |  |   |   |   | 4 |   |   |   |   |  |   |   |   |   |  |  | 2 |   |   |   |   |  |  |  |  |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |   |   |   |   |   |   |   |  | 3 |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Upper Molar, Fibrosis                                  |   |   |  |   |   |   |   |   |   |   |   |  | 4 |   |   |   |  |  |   |   |   |   |   |  |  |  |  |
| Upper Molar, Foreign Body                              |   |   |  |   |   |   |   |   |   |   |   |  | X |   |   |   |  |  |   |   |   |   |   |  |  |  |  |

|         |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |  |  |  |  |   |   |   |   |
|---------|---|---|--|---|---|---|---|---|---|---|---|--|---|---|---|--|--|--|--|---|---|---|---|
| Trachea | + | + |  | + | + | + | A | + | + | + | + |  | + | + | + |  |  |  |  | + | + | A | + |
|---------|---|---|--|---|---|---|---|---|---|---|---|--|---|---|---|--|--|--|--|---|---|---|---|

SPECIAL SENSES SYSTEM

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cataract             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retina, Autolysis    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retina, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Zymbal's Gland       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |           | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |      |      |      |      |
|---|-----------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|------|------|------|------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 Veh. Ctrl M</b> | ANIMAL ID | 0550        | 0722 | 0725 | 0728 | 0727 | 0727 | 0727 | 0544 | 0622 | 0073 | 0053 | 0059 | 0056 | 0068 | 0073 | 0063 | 0052 | 0051 | 0079 | 0072 |                    | 0046 | 0064 | 0067 | 0058 | 0072 |
|   |           | 0001        | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0010 | 0011 | 0012 | 0013 | 0014 | 0015 | 0016 | 0017 | 0018 | 0019 | 0020 |                    | 0021 | 0022 | 0023 | 0024 | 0025 |
|   |           | 1111        | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230               | 2231 | 2232 | 2233 | 2234 |      |

Duct, Dilatation

**URINARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Casts Protein                            |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   | 1 |   |   |   | 3 |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nephropathy                              | 4 | 4 | 4 | 3 | 1 | 2 | 4 | 3 | 4 |   | 2 | 2 | 4 |   | 1 | 4 | 1 | 2 | 2 | 2 |   | 1 | 4 | 1 | 4 |
| Cortex, Cyst                             |   | X |   | X |   | X | X |   |   |   |   |   | X |   | X |   |   | X | X |   | X |   |   |   |   |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   | 4 |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Cyst                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   | X | X | X |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Urinary Bladder                          | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Lumen, Dilatation                        | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                      |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b> | 7 | 4 | 5 | 5 | 7 | 7 | 7 | 2 | 4 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 4 | 5 | 6 | 7 | 6 | 4 | 2 | 6 |   |   |   |   |   |   |   |   |   |   |   |   |
|  | 2 | 8 | 2 | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 3 | 2 | 2 | 1 | 7 | 9 | 5 | 2 | 2 | 3 | 9 | 8 | 0 |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>F1 Veh. Ctrl M</b>                            | 1 | 7 | 7 | 0 | 8 | 8 | 8 | 6 | 6 | 7 | 0 | 7 | 7 | 7 | 8 | 7 | 5 | 5 | 3 | 7 | 4 | 5 | 5 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  | 0 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|  | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|  | 5 | 6 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |   |   |   |   |   |   |   |   |   |   |   |   |
|  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           |            |            |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---|---|---|---|-----------|------------|------------|
| Esophagus                               | + | + | + | + |   |   |   |   | + | + | + | + | + |   |   |   |   | + | + | + | + | + |   |   |   |   | + | + | + | + | <b>35</b> |   |   |   |   |           |            |            |
| Intestine Large, Colon                  | + | + | + | + |   |   |   |   | + | A | + | + | + |   |   |   |   | + | A | + | + | + |   |   |   |   | + | + | + | + | <b>29</b> |   |   |   |   |           |            |            |
| Intestine Small, Ileum                  | + | + | + | + |   |   |   |   | + | A | + | + | + |   |   |   |   | + | A | A | + | + |   |   |   |   | + | A | + | + | <b>26</b> |   |   |   |   |           |            |            |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | + | + | + | + | +         |            |            |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>1</b>   | <b>2.0</b> |
| Basophilic Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |           |   |   |   |   | <b>5</b>  |            |            |
| Clear Cell Focus                        |   |   |   |   | X | X | X |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>11</b>  |            |
| Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>2</b>   |            |
| Degeneration, Cystic                    |   |   |   |   | 1 |   | 1 |   |   | 1 | 2 |   |   |   | 1 |   |   | 1 |   | 2 | 1 | 2 | 1 |   |   |   |   |   |   |   |           |   |   |   |   | <b>21</b> | <b>1.4</b> |            |
| Fatty Change                            |   |   |   |   |   |   | 3 | 4 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   | <b>4</b>  | <b>3.3</b> |            |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   | <b>6</b>  |            |            |
| Infiltration Cellular, Mononuclear Cell | 1 |   | 1 | 2 | 1 | 1 | 1 |   |   |   | 2 |   | 2 | 1 | 2 | 2 | 1 |   |   | 1 | 2 | 1 |   |   |   |   |   | 1 | 1 |   |           |   | 1 | 1 |   | <b>35</b> | <b>1.4</b> |            |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |           |   |   |   |   | <b>2</b>  | <b>1.0</b> |            |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   | <b>1</b>  |            |            |
| Tension Lipidosis                       | 3 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   | <b>3</b>  | <b>3.7</b> |            |
| Vacuolization Cytoplasmic               |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 3 | 3 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |           |   |   |   |   | <b>12</b> | <b>1.8</b> |            |
| Bile Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 2 | 1 |   |   |   |   |   | 1 | 2 |           |   |   |   |   | <b>16</b> | <b>1.6</b> |            |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>1</b>   |            |
| Biliary Tract, Fibrosis                 |   |   |   |   |   | 1 | 1 |   |   |   | 2 |   |   |   | 1 |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |           |   |   |   |   | <b>13</b> | <b>1.3</b> |            |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>2</b>   | <b>3.0</b> |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>4</b>   | <b>1.3</b> |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>1</b>   |            |
| Fat, Necrosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |   |   |   |   |           | <b>1</b>   | <b>4.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0446  | 0770  | 0770  | 0677  | 0767  | 0768  | 0667  | 0445  | 0562  | 0673  | 0724  | 0645  |          | 0228  | 0698  |
| ANIMAL ID  | 04352       | 04336 | 04333 | 04333 | 04343 | 06664 | 06664 | 06665 | 06665 | 06665 | 06665 | 06665 | 06665 | 06665 | 08883 | 08883 | 08883 | 08883 | 08883 | 08883 | 08883    | 08883 | 08883 |

|                                      |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|-----|-----|
| Oral Mucosa                          |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   | + | 1  |     |     |     |     |     |
| Pancreas                             |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   | + | 50 |     |     |     |     |     |
| Basophilic Focus                     |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   | X | 2  |     |     |     |     |     |
| Infiltration Cellular, Lymphocyte    | 3 |   | 3 |   | 2 | 2 | 1 |   | 1 |  |  | 2 | 1 | 2 | 2 | 2 |   | 2 | 3 | 1 | 2 |    | 1   | 3   | 36  | 2.0 |     |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |     |     |     |
| Lipomatosis                          |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   | 4  | 2   | 7   | 3.3 |     |     |
| Pigmentation                         |   | 2 | 2 | 1 | 1 | 1 |   | 1 |   |  |  |   |   |   | 2 |   | 2 | 2 | 2 |   |   |    | 1   | 2   | 29  | 1.4 |     |
| Acinus, Degeneration                 | 3 | 3 | 4 | 2 | 4 | 3 | 1 | 1 | 3 |  |  | 3 |   | 2 | 3 | 3 | 3 | 4 | 3 | 4 | 1 | 3  |     | 1   | 4   | 42  | 2.8 |
| Artery, Fibrosis                     |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |     |     |     |
| Artery, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 1   | 2.0 |     |     |
| Artery, Mineralization               |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 4   | 1   | 4.0 |     |
| Artery, Pigmentation                 |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     |     | 1   | 3.0 |     |
| Stomach, Forestomach                 |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   | + | 36 |     |     |     |     |     |
| Hyperplasia, Basal Cell              |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   | 3  | 1   | 3.0 |     |     |     |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 2   | 1   | 2.0 |     |
| Mineralization                       |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 3   | 1   | 3.0 |     |
| Ulcer                                |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 2   | 1   | 2.0 |     |
| Epithelium, Hyperplasia              |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 4   | 1   | 4.0 |     |
| Stomach, Glandular                   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   | + | 34 |     |     |     |     |     |
| Edema                                |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 3   | 1   | 3.0 |     |
| Mineralization                       |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 4   | 1   | 4.0 |     |
| Necrosis                             |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |    |     | 4   | 1   | 4.0 |     |
| Epithelium, Hyperplasia              |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   | 4  |     | 4   | 2   | 4.0 |     |

CARDIOVASCULAR SYSTEM

|              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |    |
|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|----|
| Blood Vessel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | 50 |
|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |        |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|--------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0426  | 0770  | 0770  | 0677  | 0767  | 0778  | 0621  | 0667  | 0445  | 0562  | 0673  | 0644  |          | 0228  | 0698  | 0604   |
| ANIMAL ID  | 04352       | 04336 | 04333 | 04333 | 04344 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888    | 08888 | 08888 |        |
| Mineralization                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 4     | 1 4.0  |
| Heart  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 50     |
| Cardiomyopathy                                       | 3           | 2     | 2     | 4     | 2     | 2     | 1     | 3     |       | 2     |       | 2     | 1     | 3     | 2     |       | 2     | 3     | 1     | 1     | 3        | 3     | 1     | 44 2.0 |
| Mineralization                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |       |       | 1 4.0  |
| Atrium, Dilatation                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1 4.0  |
| Ventricle, Dilatation                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1 4.0  |
| <b>ENDOCRINE SYSTEM</b>                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |        |
| Adrenal Cortex                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 50     |
| Angiectasis  |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          | 3     |       | 2 3.5  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1 4.0  |
| Degeneration, Cystic                                 |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          |       |       | 4 2.5  |
| Hyperplasia  |             |       |       | 1     |       |       |       |       |       |       |       |       |       |       | 2     |       | 3     |       |       |       |          |       |       | 6 1.7  |
| Hypertrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 2 1.5  |
| Metaplasia, Osseous                                  |             |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |          |       |       | 1 2.0  |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          |       |       | 1 4.0  |
| Vacuolization Cytoplasmic                            |             | 3     |       |       |       | 1     | 1     |       |       |       |       |       |       | 1     | 2     |       |       |       | 2     | 1     | 2        | 2     |       | 18 1.8 |
| Adrenal Medulla                                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 50     |
| Angiectasis  |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          |       |       | 1 4.0  |
| Hyperplasia  |             |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       | 2     |       |       |       |       |          |       |       | 5 1.4  |
| Islets, Pancreatic                                   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 50     |
| Hyperplasia  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 2 3.5  |
| Parathyroid Gland                                    | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 49     |
| Hyperplasia  |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       | 2     | 1     |       |       |       |          | 4     |       | 11 1.9 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0426  | 0770  | 0770  | 0770  | 0637  | 0728  | 0728  | 0617  | 0665  | 0495  | 0569  | 0623  |          | 0727  | 0664  | 0495  | 0285  | 0680  |
| ANIMAL ID  | 04352       | 04436 | 04436 | 04436 | 04436 | 06661 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888    | 08888 | 08888 | 08888 | 08888 | 08888 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Pituitary Gland                  | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48     |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 6 4.0  |
| Atrophy                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Pigmentation                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Pars Distalis, Cyst              |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   |   |   |   | X |   |   | 8      |
| Pars Distalis, Cyst Multilocular |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2      |
| Pars Distalis, Hyperplasia       |   |   | 2 | 2 |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   | 11 2.1 |
| Pars Distalis, Hypertrophy       |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   |   |   |   |   |   | 4 1.8  |
| Pars Intermedia, Cyst            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |
| Thyroid Gland                    | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 46     |
| Ultimobranchial Cyst             |   |   |   | X |   | X |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 7      |
| C-cell, Hyperplasia              |   |   |   | 3 |   |   |   | 1 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1 |   |   |   | 9 1.7  |
| Follicular Cell, Hyperplasia     | 2 |   |   |   | 2 |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 2.3  |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |       |
| Hemorrhage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 4.0 |

GENITAL SYSTEM

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Bulbourethral Gland  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |       |
| Coagulating Gland    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 47 |       |
| Atrophy              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0 |
| Cyst, Mucinous       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1     |
| Degeneration, Cystic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0 |
| Fibrosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |        |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|--------|-------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0426  | 0770  | 0770  | 0770  | 0637  | 0778  | 0677  | 0665  | 0459  | 0563  | 0674  | 0645  |          | 0228  | 0680   |       |
| ANIMAL ID  | 04352       | 04336 | 04332 | 04333 | 04344 | 04664 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666    | 04666 |        |       |
| Inflammation, Suppurative                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     | 2 4.0  |       |
| Inflammation, Chronic Active                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |        | 1 3.0 |
| Lumen, Dilatation                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |        | 2 3.5 |
| Epididymis   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 49     |       |
| Exfoliated Germ Cell                                 |             |       | 1     |       |       |       |       |       |       |       |       |       |       |       | 1     | 1     |       |       |       |       | 4        | 2     | 10 1.8 |       |
| Hypospermia  |             |       |       | 4     |       |       | 4     | 4     |       |       | 4     |       |       |       |       |       | 4     |       |       |       | 4        |       | 11 4.0 |       |
| Infiltration Cellular, Lymphocyte                    | 1           |       |       | 1     |       | 1     |       | 1     |       |       |       | 1     |       |       | 2     |       |       |       |       | 1     |          |       | 10 1.2 |       |
| Epithelium, Degeneration                             |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1 4.0  |       |
| Fat Pad, Epididymal                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | +        |       | 2      |       |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |       | 2 4.0  |       |
| Preputial Gland                                      | +           |       |       |       | +     |       |       |       |       | +     |       |       | +     |       | +     |       |       | +     | +     | +     |          |       | 15     |       |
| Abscess  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |          |       | 2 4.0  |       |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |          |       | 3 3.0  |       |
| Hyperkeratosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |          |       | 3 3.7  |       |
| Inflammation, Suppurative                            | 4           |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 4     |       |       | 2     |          |       | 7 3.1  |       |
| Duct, Dilatation                                     | 4           |       |       |       | 4     |       |       |       |       |       |       | 3     |       |       |       |       | 4     |       | 3     | 3     |          |       | 10 3.7 |       |
| Prostate, Dorsal/lateral Lobe                        | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 50     |       |
| Atrophy  |             |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2 3.5  |       |
| Cyst, Mucinous                                       |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |          |       | 2      |       |
| Fibrosis   |             |       | 2     | 4     |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       | 2     | 4     |          | 2     | 9 2.4  |       |
| Infiltration Cellular, Lymphocyte                    | 2           |       | 1     | 3     |       | 1     | 2     |       |       | 1     | 1     | 2     | 2     | 2     | 1     | 1     | 1     |       | 2     | 1     | 4        | 1     | 33 1.5 |       |
| Inflammation, Suppurative                            | 2           | 1     |       | 4     |       | 2     | 3     |       |       | 3     | 2     |       | 2     | 2     | 2     | 2     | 2     | 1     | 2     | 2     | 4        | 1     | 41 2.0 |       |
| Prostate, Ventral Lobe                               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 50     |       |
| Atrophy  |             |       | 3     | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 4 3.3  |       |
| Fibrosis   |             |       |       |       | 3     | 2     | 4     |       |       |       |       | 3     |       | 2     | 2     | 2     |       |       |       | 4     |          | 3     | 15 2.9 |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |       |      |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|------|------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0446  | 0770  | 0777  | 0777  | 0667  | 0777  | 0667  | 0777  | 0664  | 0556  | 0667  | 0667  |          | 0445  | 0552  | 0662  | 0773  | 0664  | 0445  | 0228  | 0660 | 0444 |
| ANIMAL ID  | 04352       | 04333 | 04333 | 04333 | 04344 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 06666 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888    | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 |      |      |
| Infiltration Cellular, Lymphocyte                    | 1           |       |       |       | 2     | 1     | 3     | 1     | 1     |       |       | 2     | 2     | 1     |       |       |       |       |       |       |          |       |       |       | 4     | 1     | 3     | 25    | 2.0  |      |
| Inflammation, Suppurative                            |             |       |       |       | 3     | 1     | 2     |       |       |       |       |       |       |       | 1     | 1     |       |       |       |       |          |       |       |       | 4     |       | 1     | 16    | 2.3  |      |
| Mineralization                                       |             |       |       |       |       |       | 3     |       |       |       |       | 3     |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 4     | 3.3  |      |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 2.0  |      |
| Epithelium, Hyperplasia                              |             |       |       |       |       |       |       |       |       |       | 2     | 3     |       |       | 3     |       |       | 2     |       |       |          |       |       |       |       |       |       | 10    | 2.2  |      |
| Seminal Vesicle                                      | +           | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +        | +     | +     | A     | +     | +     | 44    |       |      |      |
| Atrophy  |             |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 2     | 3.5  |      |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 3.0  |      |
| Inflammation, Suppurative                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 4     |       | 2     | 4.0  |      |
| Epithelium, Hyperplasia                              |             |       |       |       |       |       |       |       |       |       | 2     |       |       | 2     | 2     |       |       |       | 2     |       | 2        |       |       |       |       |       |       | 7     | 2.4  |      |
| Lumen, Dilatation                                    | 4           |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 2     | 4.0  |      |
| Testes   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | 49    |      |      |
| Polyarteritis  |             |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 12    | 2.8  |      |
| Seminiferous Tubule, Degeneration                    | 1           |       | 2     | 4     | 1     | 2     | 4     | 4     | 1     | 1     | 4     | 3     |       | 1     | 3     | 1     | 1     | 4     |       | 1     | 1        | 3     | 2     | 1     | 1     |       | 40    | 2.1   |      |      |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone Marrow                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |     |
| Hypocellularity                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 5   | 3.0 |
| Necrosis                                     |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |     |
| Myeloid Cell, Hyperplasia                    | 4 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 6  | 3.5 |     |
| Lymph Node                                   | + | + |   | + |   |   |   |   |   | + | + |   |   |   |   |   |   |   | + |   | + |   |   |   |   | + |   | 15 |     |     |
| Axillary, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Axillary, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Lumbar, Degeneration, Cystic                 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 3.5 |     |
| Lumbar, Hyperplasia, Lymphoid                | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 3.0 |     |
| Lumbar, Infiltration Cellular, Plasma Cell   | 3 |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 3.6 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |        |         |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|--------|---------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0446  | 0770  | 0770  | 0770  | 0637  | 0778  | 0667  | 0445  | 0569  | 0663  | 0774  | 0664  |          | 0426   | 0064    |
| ANIMAL ID  | 04352       | 04333 | 04333 | 04333 | 04344 | 06644 | 06665 | 06665 | 06655 | 06655 | 06655 | 06655 | 06655 | 06655 | 08333 | 08333 | 08333 | 08333 | 08333 | 08333 | 08333    | 08333  |         |
| Renal, Degeneration, Cystic                          | 4           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 4      |         |
| Renal, Hemorrhage                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 7 3.4   |
| Renal, Hyperplasia, Lymphoid                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 4.0   |
| Renal, Infiltration Cellular, Plasma Cell            | 4           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 3 2.5   |
| Renal, Pigmentation                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 4 3 4.0 |
| Lymph Node, Mandibular Degeneration, Cystic          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 4.0   |
| Hyperplasia, Lymphoid                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 4 3.0   |
| Infiltration Cellular, Plasma Cell                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 3 3.7   |
| Spleen   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 49      |
| Hematopoietic Cell Proliferation                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 13 2.2  |
| Hyperplasia, Lymphoid                                | 3           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 3.0   |
| Mineralization                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 3.0   |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 3.0   |
| Pigmentation   | 2           | 3     | 4     |       |       | 2     |       | 4     |       |       | 2     | 2     | 2     | 3     |       | 3     | 2     |       | 2     | 2     |          | 28 2.3 |         |
| Thymus   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 50      |
| Atrophy  | 4           | 4     | 4     | 4     | 4     | 4     | 2     | 3     | 4     |       | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4        | 4      | 47 3.9  |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |        | 1 2.0   |

**INTEGUMENTARY SYSTEM**

|                        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Mammary Gland          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50     |
| Galactocele            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1      |
| Hyperplasia, Lobular   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Alveolus, Degeneration |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 28 3.6 |
| Alveolus, Dilatation   | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 2.4  |
| Duct, Dilatation       | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 14 2.4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0226  | 0446  | 0770  | 0770  | 0770  | 0637  | 0778  | 0667  | 0667  | 0445  | 0569  | 0667  | 0727  |          | 0664  | 0445  | 0228  |
| ANIMAL ID  | 04352       | 04336 | 04336 | 04333 | 04344 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666    | 04666 | 04666 | 04666 |

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Skin  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 12 |       |
| Abscess   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 1 4.0 |
| Cyst Epithelial Inclusion                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  | 4     |
| Inflammation, Granulomatous Epithelium, Foot, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 2 4.0 |
| Foot, Edema   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 6 4.0 |
| Foot, Fibrosis  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 5 4.0 |
| Foot, Inflammation, Chronic Active                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 6 4.0 |
| Foot, Necrosis  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 6 4.0 |
| Foot, Ulcer   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 6 4.0 |

MUSCULOSKELETAL SYSTEM

|                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Bone                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |       |
| Bone, Femur            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 | 1 3.0 |
| Fibrous Osteodystrophy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  |       |
| Skeletal Muscle        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |       |

NERVOUS SYSTEM

|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |         |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---------|
| Brain, Brain Stem |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 | 12 2.6  |
| Compression       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 4 4 4 1 |
| Brain, Cerebellum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 | 1 1.0   |
| Hemorrhage        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |         |
| Brain, Cerebrum   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 | 1 1.0   |
| Gliososis         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |         |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|  | 071         | 048   | 052   | 056   | 072   | 077   | 077   | 022   | 044   | 077   | 077   | 077   | 066   | 077   | 077   | 066   | 066   | 044   | 055   | 066   |          | 077   | 066   | 044   | 022   |
| ANIMAL ID  | 04352       | 04436 | 04433 | 04433 | 04434 | 04664 | 04664 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665 | 04665    | 04665 | 04665 | 04665 | 04665 |

|                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |     |
|---------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|-----|
| Hemorrhage                | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 | 1.5 |     |
| Mineralization            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 1   | 1.0 |
| Necrosis                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 1   | 2.0 |
| Ventricle, Dilatation     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 2   | 1.7 |
| Nerve Trigeminal          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |
| Axon, Degeneration        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 2   | 1.9 |
| Peripheral Nerve, Sciatic |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |
| Axon, Degeneration        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 4.0 |
| Peripheral Nerve, Tibial  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |
| Axon, Degeneration        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 4.0 |
| Spinal Cord, Cervical     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |
| Spinal Cord, Lumbar       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |
| Axon, Degeneration        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 4   | 2.1 |
| Spinal Cord, Thoracic     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     | 11  |

RESPIRATORY SYSTEM

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Lung                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 38  |
| Congestion                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 | 4.0 |
| Foreign Body                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 4   |
| Infiltration Cellular, Histiocyte |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 2 | 2.3 |
| Inflammation, Granulomatous       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 2.7 |
| Inflammation, Chronic             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 4.0 |
| Inflammation, Chronic Active      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |   | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|  | 0721        | 0487  | 0527  | 0560  | 0728  | 0778  | 0778  | 0778  | 0822  | 0846  | 0877  | 0877  | 0877  | 0906  | 0906  | 0906  | 0906  | 0906  | 0906  | 0906  |          | 0906  |
| ANIMAL ID  | 04352       | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352 | 04352    | 04352 |

|  |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     |       |
|--|---|---|---|---|--|--|--|--|---|---|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|-----|-------|
| Metaplasia, Osseous Necrosis                           |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  | 1 | 1.0 |       |
|  |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 3   | 3.0   |
| Nose   | + | + | + | + |  |  |  |  | + | + |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 33  |       |
| Autolysis  |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 4.0 |
| Fibrous Osteodystrophy                                 |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 2.0 |
| Foreign Body   |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 2     |
| Inflammation, Suppurative                              |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 2 1.0 |
| Inflammation, Chronic Active                           | 4 |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 4.0 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    | 3 |   |   | 2 |  |  |  |  |   | 4 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |   |     | 7 2.7 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 2.0 |
| Respiratory Epithelium, Hyperplasia                    |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 2.0 |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |   |   |   | 2 |  |  |  |  |   | 3 |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 4 2.8 |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 3.0 |
| Upper Molar, Fibrosis                                  |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1 4.0 |
| Upper Molar, Foreign Body                              |   |   |   |   |  |  |  |  |   |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |     | 1     |
| Trachea  | + | + | + | + |  |  |  |  | + | + |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 31  |       |

**SPECIAL SENSES SYSTEM**

|                      |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |
|----------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Eye                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |       |
| Cataract             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 3 3.0 |
| Retina, Autolysis    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1     |
| Retina, Degeneration |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 3 4.0 |
| Zymbal's Gland       | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04  
Test Type: CHRONIC  
Route: GAVAGE  
Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
Time Report Requested: 10:21:03  
First Dose M/F: 09/25/12 / 09/25/12  
Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. Ctrl M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
|  | ANIMAL ID   | 7 | 4 | 5 | 5 | 7 | 7 | 7 | 2 | 4 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 4 | 5 | 6 | 7 | 6 | 4 | 2 | 6               |
|  |             | 2 | 8 | 2 | 6 | 2 | 2 | 2 | 2 | 2 | 1 | 0 | 3 | 2 | 2 | 1 | 7 | 9 | 5 | 2 | 2 | 3 | 9 | 8 | 0 |                 |
|  |             | 1 | 7 | 7 | 0 | 8 | 8 | 8 | 6 | 6 | 7 | 0 | 7 | 7 | 7 | 8 | 7 | 5 | 5 | 9 | 3 | 7 | 4 | 5 | 5 | 4               |
| Duct, Dilatation                                     |             | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>    |

**URINARY SYSTEM**

| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b> |               |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |           | <b>3 4.0</b>  |
| Casts Protein                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 1.0</b>  |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |           | <b>6 1.5</b>  |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |           | <b>1 4.0</b>  |
| Nephropathy                              | 3 | 1 | 3 | 2 | 2 | 4 | 2 | 2 |   | 1 |   | 2 | 2 | 3 | 4 | 1 | 1 |   | 3 | 1 | 4 | 4 | 4 | 1 | 4         | <b>44 2.6</b> |
| Cortex, Cyst                             | X |   | X | X | X | X |   |   |   |   |   | X |   | X |   |   |   |   |   |   | X | X | X |   | X         | <b>20</b>     |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3 3.0</b>  |
| Renal Tubule, Cyst                       |   |   |   |   |   |   |   |   |   | X | X |   | X | X |   |   |   |   |   |   | X |   | X |   |           | <b>11</b>     |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |           | <b>3 2.0</b>  |
| Urinary Bladder                          |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b>      |
| Lumen, Dilatation                        |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |           | <b>4 3.8</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST | 0681 | 0713 | 0517 | 0293 | 0727 | 0779 | 0663 | 0727 | 0641 | 0664 | 0723 | 0779 | 0543 | 0661 | 0665 | 0578 | 0722 | 0775 | 0777 | 0777 | 0777 | 0777 | males<br>(cont...) |
|  | ANIMAL ID   | 0017 | 0018 | 0019 | 0020 | 0021 | 0022 | 0023 | 0024 | 0025 | 0026 | 0027 | 0028 | 0029 | 0030 | 0031 | 0032 | 0033 | 0034 | 0035 | 0036 | 0037 | 0038 |                    |
|  |             | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    |                    |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + |   | + | + |   | + | + | + | + |   | + | + | + | + | + |   |   |   |   | + |
| Perforation                                      |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Periesophageal Tissue, Foreign Body              |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Periesophageal Tissue, Inflammation, Suppurative |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Periesophageal Tissue, Necrosis                  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon                           | + | A | A | A |   | A | + |   | + | + | + | + |   | + | + | + | A | + |   |   |   |   | + |
| Intestine Small, Ileum                           | + | A | A | A |   | A | + |   | + | + | + | + |   | + | + | + | A | + |   |   |   |   | A |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                                      |   |   |   |   |   |   | 1 |   |   |   | 2 | 1 |   |   |   |   |   |   | 2 |   | 3 |   |   |
| Basophilic Focus                                 |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   | X |   |   |   |
| Cholangiofibrosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |
| Clear Cell Focus                                 |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   | X |   |   |   |   |
| Deformity  |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                             |   | 1 | 2 |   | 1 |   | 1 | 2 |   |   |   |   |   | 1 |   |   | 2 | 2 | 2 |   |   | 1 | 1 |
| Eosinophilic Focus                               |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                                     |   |   |   |   |   |   |   |   | 2 |   | 2 | 2 |   |   |   | 3 |   |   |   |   |   |   | 4 |
| Hepatodiaphragmatic Nodule                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell          | 1 |   |   |   | 2 |   |   | 2 | 2 | 1 | 1 | 1 | 1 |   |   | 2 | 2 |   |   | 2 |   | 1 | 2 |
| Infiltration Cellular, Polymorphonuclear         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Inflammation, Chronic Active                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Tension Lipidosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic                        |   |   |   |   | 2 | 1 |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 2 |   |   |   |
| Bile Duct, Hyperplasia                           |   | 2 |   |   | 3 |   |   |   | 4 |   |   |   | 1 |   |   | 2 |   | 1 |   |   |   |   | 2 |
| Biliary Tract, Cyst                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0681        | 0713 | 0517 | 0293 | 0727 | 0719 | 0693 | 0727 | 0651 | 0729 | 0419 | 0644 | 0662 | 0730 | 0729 | 0543 | 0630 | 0661 | 0665 | 0578 | 0724 | 0725 | 0777 | 0777 |           |                    |
| Biliary Tract, Fibrosis                            | 2           |      |      | 1    |      |      |      |      | 2    |      |      |      |      | 1    |      | 1    | 2    | 1    |      |      |      |      |      | 1    |           |                    |
| Hepatocyte, Necrosis                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      | 1    |      |      |           |                    |
| Oval Cell, Hyperplasia                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pancreas   | +           | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  |
| Basophilic Focus                                   |             |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Infiltration Cellular, Lymphocyte                  | 2           |      |      |      | 2    |      | 1    | 2    | 2    | 1    |      |      |      | 2    | 2    |      |      | 1    | 2    |      | 3    | 2    | 1    | 1    | 2         | 2                  |
| Inflammation, Chronic Active                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |           |                    |
| Lipomatosis  |             | 3    |      |      |      | 3    | 2    |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 4    |      |      |      |           |                    |
| Pigmentation                                       | 1           |      |      |      | 1    |      |      | 1    | 1    | 2    |      |      |      | 3    |      | 1    | 1    |      |      |      | 2    | 2    |      |      | 1         | 1                  |
| Polyarteritis                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |           |                    |
| Acinus, Degeneration                               | 3           | 1    |      |      | 3    |      | 2    | 3    | 3    | 3    |      |      | 3    | 4    |      |      |      | 4    | 4    | 2    | 4    | 4    | 2    | 1    | 3         | 2                  |
| Duct, Dilatation                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |           |                    |
| Stomach, Forestomach                               | +           | +    | +    | +    |      | +    | +    |      | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      |      |      |      |      | +         |                    |
| Fibrosis   |             |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Inflammation, Chronic Active                       | 2           |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Ulcer  |             |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Epithelium, Hyperplasia                            | 4           |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Stomach, Glandular                                 | +           | +    | A    | +    |      | +    | +    |      | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      |      |      |      |      | +         |                    |
| Inflammation, Chronic Active                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mineralization                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Epithelium, Hyperplasia                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Tongue   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Epithelium, Hyperplasia                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |

**CARDIOVASCULAR SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>6<br>8<br>1      | 0<br>7<br>1<br>3      | 0<br>5<br>1<br>7      | 0<br>2<br>9<br>3      | 0<br>7<br>2<br>7      | 0<br>7<br>1<br>9      | 0<br>6<br>9<br>3      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>1<br>9      | 0<br>6<br>4<br>4      | 0<br>6<br>2<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>9      | 0<br>5<br>4<br>3      | 0<br>6<br>3<br>0      | 0<br>6<br>1<br>7      | 0<br>5<br>8<br>6      | 0<br>7<br>2<br>4      | 0<br>7<br>2<br>5      |                       | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>0<br>0      | 0<br>7<br>2<br>7      |                       |                       |
| ANIMAL ID  | 0<br>0<br>1<br>7<br>1 | 0<br>0<br>1<br>7<br>2 | 0<br>0<br>1<br>8<br>1 | 0<br>0<br>1<br>8<br>2 | 0<br>0<br>1<br>9<br>1 | 0<br>0<br>1<br>9<br>2 | 0<br>0<br>2<br>0<br>1 | 0<br>0<br>2<br>0<br>2 | 0<br>0<br>2<br>1<br>1 | 0<br>0<br>2<br>1<br>2 | 0<br>2<br>3<br>3<br>1 | 0<br>2<br>3<br>3<br>2 | 0<br>2<br>3<br>3<br>4 | 0<br>2<br>3<br>3<br>4 | 0<br>2<br>3<br>3<br>5 | 0<br>2<br>3<br>3<br>5 | 0<br>2<br>3<br>3<br>6 | 0<br>2<br>3<br>3<br>6 | 0<br>2<br>3<br>3<br>7 | 0<br>2<br>3<br>3<br>7 | 0<br>4<br>4<br>9<br>1 | 0<br>4<br>4<br>9<br>2 | 0<br>4<br>4<br>9<br>0 | 0<br>4<br>5<br>9<br>1 | 0<br>4<br>5<br>0<br>2 | 0<br>4<br>5<br>0<br>1 | 0<br>4<br>5<br>1<br>1 |

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Blood Vessel Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Polyarteritis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Thrombosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy      | 3 | 2 | 2 | 1 | 3 | 1 | 2 | 4 | 2 | 1 | 2 | 2 | 1 | 3 |   | 3 |   | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 |
| Metaplasia, Osseous |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Mineralization      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thrombosis          |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Degeneration, Cystic      | 2 |   |   |   |   | 1 | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia               | 1 | 1 |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Vacuolization Cytoplasmic |   | 1 |   |   |   |   |   |   |   | 2 |   | 1 | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia     | 3 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Islets, Pancreatic | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia        |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia       | 4 |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   | 2 |   |   | 1 |   | 2 |   |   |

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pituitary Gland     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis         |   |   | 4 |   |   | 4 |   |   |   |   |   | 4 | 4 | 4 | 4 |   |   |   |   | 2 |   |   |   |   |   |   |
| Pars Distalis, Cyst |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | males<br>(cont...) |        |        |        |        |
|--|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|--------|--------|--------|--------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M |  | 0681        | 0713   | 0517   | 0293   | 0727   | 0779   | 0633   | 0767   | 0619   | 0449   | 0664   | 0770   | 0779   | 0543   | 0663   | 0665   | 0586   | 0774   | 0772   | 0725   |                    | 0777   | 0777   | 0777   | 0777   |
| ANIMAL ID  |  | 001171      | 001181 | 001188 | 001192 | 001201 | 001202 | 001203 | 001204 | 001205 | 001206 | 001207 | 001208 | 001209 | 001210 | 001211 | 001212 | 001213 | 001214 | 001215 | 001216 |                    | 001217 | 001218 | 001219 | 001220 |

Pars Distalis, Hyperplasia  
 Pars Distalis, Hypertrophy  
 Pars Distalis, Vacuolization Cytoplasmic

2 2 2 3

Thyroid Gland  
 Ultimobranchial Cyst  
 C-cell, Hyperplasia  
 Follicular Cell, Hyperplasia

+ + A A + + + + + + X + + + + + A + + + + X + A +  
 1 2 3 1 1 2 2 2 1 2

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland  
 Atrophy  
 Cyst, Mucinous

+ +

Epididymis  
 Exfoliated Germ Cell  
 Hypospermia  
 Infiltration Cellular, Lymphocyte  
 Polyarteritis

+  
 1 3 1 4 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Fat Pad, Epididymal  
 Necrosis

+  
 4

Preputial Gland  
 Atrophy

+ + + 3 + + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | males<br>(cont...) |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|
|  | 0681        | 0713   | 0517   | 0293   | 0727   | 0779   | 0633   | 0727   | 0667   | 0764   | 0660   | 0770   | 0779   | 0543   | 0663   | 0665   | 0578   | 0774   | 0777   | 0777   | 0777   | 0777   | 0777   |        |                    |
| ANIMAL ID  | 001171      | 001172 | 001178 | 001182 | 001191 | 001192 | 001199 | 001200 | 001202 | 001203 | 001204 | 001205 | 001206 | 001207 | 001208 | 001209 | 001210 | 001211 | 001212 | 001213 | 001214 | 001215 | 001216 | 001217 |                    |
| Fibrosis   |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Hyperkeratosis                                     |             |        |        |        |        |        |        |        | 4      |        |        |        |        |        |        |        |        | 4      |        | 4      |        |        |        |        |                    |
| Inflammation, Suppurative                          |             |        |        |        |        |        |        |        | 4      |        |        |        |        |        |        |        |        | 4      |        | 4      |        |        | 2      |        |                    |
| Duct, Dilatation                                   |             |        |        |        |        |        |        |        | 4      |        |        |        |        |        |        |        |        | 4      |        | 4      |        |        | 3      |        |                    |
| Epithelium, Hyperplasia                            |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 4      |        |        |        |        |        |        |                    |
| Prostate, Dorsal/lateral Lobe                      | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      |                    |
| Cyst, Mucinous                                     |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Fibrosis   |             |        |        |        |        |        |        | 4      |        |        |        |        | 3      |        |        |        | 2      |        |        |        |        |        |        |        |                    |
| Infiltration Cellular, Lymphocyte                  |             |        |        | 1      |        | 1      | 2      |        | 2      | 2      |        | 1      | 1      | 1      | 1      |        | 1      |        |        | 2      | 2      | 1      | 1      | 1      |                    |
| Inflammation, Suppurative                          | 2           | 2      | 2      | 2      | 2      | 2      | 2      | 3      | 3      |        | 1      | 1      | 2      | 1      | 1      | 2      | 1      | 1      | 2      | 2      | 3      | 1      | 1      | 2      |                    |
| Epithelium, Hyperplasia                            |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Prostate, Ventral Lobe                             | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      |                    |
| Atrophy  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Fibrosis   |             |        |        |        |        |        |        |        |        |        |        | 4      |        |        |        |        |        |        |        |        |        | 2      |        |        |                    |
| Infiltration Cellular, Lymphocyte                  |             |        |        | 1      |        |        |        |        | 1      | 3      |        |        |        | 1      | 1      |        | 2      |        |        | 2      |        | 1      |        |        |                    |
| Inflammation, Suppurative                          |             |        |        |        |        | 1      |        |        | 2      |        |        |        |        |        |        |        |        |        |        | 2      |        |        |        |        |                    |
| Mineralization                                     |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |                    |
| Polyarteritis                                      |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |        |        |                    |
| Epithelium, Hyperplasia                            |             |        |        | 3      |        | 4      |        |        | 2      |        |        |        | 2      |        |        |        | 1      |        |        |        |        |        |        | 3      |                    |
| Seminal Vesicle                                    | +           | A      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      |                    |
| Atrophy  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 4      |                    |
| Inflammation, Chronic Active                       |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Epithelium, Hyperplasia                            | 3           |        |        |        |        |        |        |        | 2      |        |        |        |        |        | 2      |        |        |        |        |        |        | 2      |        | 3      |                    |
| Lumen, Dilatation                                  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |
| Testes   | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      |                    |
| Polyarteritis                                      | 3           | 1      |        |        |        |        |        |        | 3      | 2      |        |        |        |        |        |        |        |        |        |        |        | 3      |        |        |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |           |                    |
|  | 6           | 7 | 5 | 2 | 7 | 7 | 6 | 7 | 6 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 0 |           |                    |
|  | 8           | 1 | 1 | 9 | 2 | 1 | 9 | 2 | 5 | 1 | 4 | 2 | 3 | 2 | 4 | 3 | 1 | 7 | 8 | 2 | 2 | 2 | 0 | 0 |           |                    |
|  | 1           | 3 | 7 | 3 | 7 | 9 | 3 | 7 | 1 | 9 | 4 | 0 | 0 | 9 | 3 | 0 | 6 | 5 | 6 | 4 | 5 | 7 | 0 | 0 |           |                    |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                    |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 0 |           |                    |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 0 |   |           |                    |
|  | 7           | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 |   |           |                    |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 0 |           |                    |
| Seminiferous Tubule, Degeneration                  | 2           | 1 |   |   |   |   |   | 4 | 1 |   | 1 |   | 1 | 4 | 1 |   | 1 | 4 | 1 | 1 | 4 | 2 | 2 | 4 |           |                    |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Hypocellularity                               |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 3 | 3 |   | 4 |   |   |   |   |   |   |   | 3 |   |
| Myeloid Cell, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |
| Lymph Node                                    | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   | + | + |   |   |   | + |   |
| Axillary, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                  | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 |   |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |
| Mediastinal, Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Renal, Degeneration, Cystic                   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 4 |   |   | 3 |   |   |   |
| Renal, Hemorrhage                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Renal, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |   |
| Lymph Node, Mandibular                        |   |   |   |   |   |   | + |   |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |
| Hyperplasia, Lymphoid                         |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |
| Infiltration Cellular, Plasma Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Lymph Node, Mesenteric                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hematopoietic Cell Proliferation              |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   | 2 |   |   |   |   |   |   | 1 | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                     | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |
|--|---------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
|  |                     | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |                     | 6           | 7 | 5 | 2 | 7 | 7 | 6 | 7 | 6 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7                  |
|  | <b>F1 2.5 BPA M</b> | 8           | 1 | 1 | 9 | 2 | 1 | 9 | 2 | 5 | 1 | 4 | 2 | 3 | 2 | 4 | 3 | 1 | 7 | 8 | 2 | 2 | 2 | 0 | 0 | 2                  |
|  | ANIMAL ID           | 1           | 3 | 7 | 3 | 7 | 9 | 3 | 7 | 1 | 9 | 4 | 0 | 0 | 9 | 3 | 0 | 6 | 5 | 6 | 4 | 5 | 7 | 0 | 7 |                    |
|  |                     | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
|  |                     | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 |                    |
|  |                     | 1           | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 |                    |
|  |                     | 7           | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 |                    |
|  |                     | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |                    |

|                       |   |  |  |   |  |   |  |   |   |   |   |   |   |   |  |   |  |  |   |  |  |   |   |   |  |
|-----------------------|---|--|--|---|--|---|--|---|---|---|---|---|---|---|--|---|--|--|---|--|--|---|---|---|--|
| Hyperplasia, Lymphoid | 2 |  |  |   |  |   |  |   |   |   |   |   |   |   |  |   |  |  |   |  |  |   |   |   |  |
| Pigmentation          | 2 |  |  | 2 |  | 4 |  | 2 | 2 | 2 | 3 | 1 | 3 | 2 |  | 2 |  |  |   |  |  | 1 | 1 | 2 |  |
| Polyarteritis         |   |  |  |   |  |   |  |   |   |   |   |   |   |   |  |   |  |  | 2 |  |  |   |   |   |  |

|            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus     | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy    | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Hemorrhage |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**INTEGUMENTARY SYSTEM**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Galactocele            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lobular   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Degeneration |   |   | 4 | 4 |   | 4 |   | 4 |   | 4 |   | 4 |   | 4 |   |   |   |   |   | 2 | 4 | 4 | 4 |   | 3 |
| Alveolus, Dilatation   |   | 3 |   |   |   | 2 |   | 3 |   |   |   | 2 | 2 |   |   | 2 |   | 2 |   |   |   |   |   | 3 | 2 |
| Duct, Dilatation       |   | 3 |   |   |   | 3 |   | 3 |   |   |   | 2 | 3 |   |   | 2 |   | 2 |   |   |   |   |   | 4 | 2 |

|                                    |  |  |  |  |  |  |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |  |   |  |  |
|------------------------------------|--|--|--|--|--|--|---|---|---|--|---|---|---|--|---|---|---|---|---|---|---|--|---|--|--|
| Skin                               |  |  |  |  |  |  | + | + | + |  | + |   |   |  | + | + |   | + | + | + |   |  |   |  |  |
| Abscess                            |  |  |  |  |  |  |   | 4 |   |  |   |   |   |  |   |   |   |   |   |   |   |  |   |  |  |
| Cyst, Squamous                     |  |  |  |  |  |  |   |   |   |  | X |   |   |  |   |   |   |   |   |   |   |  |   |  |  |
| Cyst Epithelial Inclusion          |  |  |  |  |  |  |   |   |   |  | X |   |   |  |   |   |   |   |   |   |   |  |   |  |  |
| Fibrosis                           |  |  |  |  |  |  |   | 4 |   |  |   |   |   |  |   |   |   |   |   |   |   |  |   |  |  |
| Inflammation, Suppurative          |  |  |  |  |  |  |   | 4 |   |  |   |   | 1 |  |   |   |   |   |   |   |   |  |   |  |  |
| Ulcer                              |  |  |  |  |  |  |   |   |   |  |   |   | 1 |  |   |   |   |   |   |   |   |  |   |  |  |
| Epithelium, Hyperplasia            |  |  |  |  |  |  |   |   |   |  |   | 3 |   |  |   |   |   |   |   |   |   |  |   |  |  |
| Epithelium, Foot, Hyperplasia      |  |  |  |  |  |  |   |   |   |  |   |   |   |  |   | 4 |   |   |   |   | 4 |  |   |  |  |
| Foot, Edema                        |  |  |  |  |  |  |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |  | 4 |  |  |
| Foot, Fibrosis                     |  |  |  |  |  |  |   |   |   |  |   |   |   |  |   |   | 4 |   |   |   |   |  | 4 |  |  |
| Foot, Inflammation, Chronic Active |  |  |  |  |  |  |   |   |   |  |   |   |   |  |   |   | 4 |   |   |   |   |  | 4 |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...) |
|--|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M |  | 0<br>6<br>8<br>1      | 0<br>7<br>1<br>3      | 0<br>5<br>1<br>7      | 0<br>2<br>9<br>3      | 0<br>7<br>2<br>7      | 0<br>7<br>1<br>9      | 0<br>6<br>9<br>3      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>4<br>9      | 0<br>6<br>2<br>0      | 0<br>6<br>3<br>0      | 0<br>7<br>2<br>9      | 0<br>5<br>4<br>3      | 0<br>6<br>1<br>6      | 0<br>6<br>7<br>5      | 0<br>5<br>8<br>6      | 0<br>7<br>2<br>4      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>0<br>0      | 0<br>7<br>2<br>7      |                       |                    |
| ANIMAL ID  |  | 0<br>0<br>1<br>7<br>1 | 0<br>0<br>1<br>7<br>2 | 0<br>0<br>1<br>8<br>1 | 0<br>0<br>1<br>8<br>2 | 0<br>0<br>1<br>9<br>1 | 0<br>0<br>1<br>9<br>2 | 0<br>0<br>2<br>0<br>1 | 0<br>0<br>2<br>0<br>1 | 0<br>0<br>2<br>1<br>2 | 0<br>0<br>2<br>1<br>2 | 0<br>2<br>3<br>3<br>1 | 0<br>2<br>3<br>3<br>2 | 0<br>2<br>3<br>3<br>4 | 0<br>2<br>3<br>3<br>4 | 0<br>2<br>3<br>3<br>5 | 0<br>2<br>3<br>3<br>5 | 0<br>2<br>3<br>3<br>6 | 0<br>2<br>3<br>3<br>6 | 0<br>2<br>3<br>3<br>7 | 0<br>4<br>4<br>9<br>2 | 0<br>4<br>4<br>9<br>2 | 0<br>4<br>4<br>9<br>0 | 0<br>4<br>4<br>9<br>1 | 0<br>4<br>5<br>0<br>2 |                    |

Foot, Necrosis

4

Foot, Ulcer

4

MUSCULOSKELETAL SYSTEM

Bone, Femur

+ +

Fibrous Osteodystrophy

NERVOUS SYSTEM

Brain, Brain Stem

+ +

Compression

4 3 1 2 3 3 4 2 3

Gliosis

Necrosis

Brain, Cerebellum

+ +

Compression

Brain, Cerebrum

+ +

Gliosis

Necrosis

Ventricle, Dilatation

2 2 1 1 2 1 2 3 1

Nerve Trigeminal

Axon, Degeneration

+

Peripheral Nerve, Sciatic

Axon, Degeneration

+

2

Peripheral Nerve, Tibial

+

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                        |
|---|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 2.5 BPA M</b> |  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                        |
|   |  | 0681        | 0713 | 0517 | 0293 | 0727 | 0779 | 0663 | 0772 | 0664 | 0460 | 0660 | 0770 | 0779 | 0543 | 0661 | 0665 | 0574 | 0772 | 0775 | 0770 |                        |
| ANIMAL ID   |  | 0011        | 0011 | 0011 | 0011 | 0011 | 0012 | 0022 | 0022 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023                   |
|   |  | 771         | 771  | 881  | 882  | 991  | 992  | 001  | 001  | 111  | 112  | 333  | 333  | 333  | 333  | 333  | 333  | 333  | 333  | 333  | 333  | 333                    |
|   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | <b>males (cont...)</b> |

Spinal Cord, Cervical

+

Spinal Cord, Lumbar  
Axon, Degeneration

+

3

Spinal Cord, Thoracic

+

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + |   |   | + | + | + |
| Congestion  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte                   | 2 |   |   |   |   |   |   | 1 |   | 3 |   | 1 |   |   |   |   |   |   |   | 2 |   |   |
| Inflammation, Granulomatous                         |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                        |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bronchiole, Epithelium, Hyperplasia                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Goblet Cell, Metaplasia                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pleura, Foreign Body                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pleura, Inflammation, Suppurative                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pleura, Necrosis                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + |   | + | + |   | + | + | + | + |   |   | + | + | + | + | + |   |   | + |
| Autolysis   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrous Osteodystrophy                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foreign Body  | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                           | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   | 4 |   |   |   | 2 | 2 |   |   | 1 |   |   | 4 | 2 |   |   | 4 |
| Olfactory Epithelium, Hyperplasia                   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|
|  | 0681        | 0713 | 0517 | 0293 | 0727 | 0779 | 0663 | 0767 | 0614 | 0664 | 0777 | 0779 | 0554 | 0663 | 0666 | 0578 | 0664 | 0574 | 0772 | 0775 | 0777 | 0777 | 0777 | 0777 |           |                    | 0777 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 001171             |      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 001172             |      |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4         | 001173             |      |
|  | 7           | 7    | 8    | 8    | 9    | 9    | 0    | 0    | 1    | 1    | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    | 0    | 0         | 001174             |      |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 001175             |      |

Respiratory Epithelium, Accumulation, Hyaline Droplet

2

2 2

2

Respiratory Epithelium, Hyperplasia, Goblet Cell

2

Transitional Epithelium, Accumulation, Hyaline Droplet

4

Trachea

+ + A A A + + + + + + + + A + A

SPECIAL SENSES SYSTEM

Eye

Cataract

Retinal Detachment

URINARY SYSTEM

Kidney

Infiltration Cellular, Polymorphonuclear

+ +

Mineralization

1 2

Nephropathy

4 4 3 1 2 4 4 4 1 1 3 2 2 1 1 4 1 4 4 2 4 2 3

Cortex, Cyst

X X X X X X X X X X X X

Renal Tubule, Cyst

X X X X X X

Transitional Epithelium, Hyperplasia

2 1 2 2

Urinary Bladder

+

Calculus Micro Observation Only

X

Lumen, Dilatation

4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | * TOTALS |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|------------------|------------------|
|  | 0<br>4<br>6<br>2 | 0<br>6<br>5<br>0 | 0<br>7<br>2<br>7 | 0<br>6<br>1<br>4 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>4 | 0<br>1<br>7<br>7 | 0<br>6<br>4<br>7 | 0<br>5<br>4<br>0 | 0<br>5<br>9<br>6 | 0<br>6<br>3<br>9 | 0<br>6<br>9<br>4 | 0<br>6<br>7<br>9 | 0<br>7<br>2<br>5 | 0<br>7<br>2<br>3 | 0<br>5<br>5<br>4 | 0<br>6<br>8<br>4 | 0<br>4<br>5<br>3 | 0<br>4<br>9<br>0 | 0<br>7<br>7<br>6 |          | 0<br>2<br>2<br>6 | 0<br>7<br>2<br>6 |
|  | ANIMAL ID        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |
|  | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0        | 0                |                  |
|  | 4                | 4                | 4                | 4                | 4                | 4                | 4                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 8                | 8                | 8                | 8        | 8                |                  |
|  | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 4                | 4                | 4                | 4                | 4        | 4                |                  |
|  | 1                | 2                | 2                | 3                | 3                | 5                | 5                | 4                | 4                | 5                | 5                | 6                | 7                | 7                | 7                | 8                | 8                | 9                | 9                | 9                | 0        | 0                |                  |
|  | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2        | 1                |                  |

**ALIMENTARY SYSTEM**

|  |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |
|--|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|
| Esophagus  | +                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>32</b>  |
| Perforation                                      |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>   |
| Periesophageal Tissue, Foreign Body              |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>   |
| Periesophageal Tissue, Inflammation, Suppurative | 4                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>4.0</b> |
| Periesophageal Tissue, Necrosis                  | 4                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>4.0</b> |
| Intestine Large, Colon                           | +                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>22</b>  |
| Intestine Small, Ileum                           | +                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>17</b>  |
| Liver  | +                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>47</b>  |
| Angiectasis                                      | 2                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1.8</b> |
| Basophilic Focus                                 | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>5</b>   |
| Cholangiofibrosis                                |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>4.0</b> |
| Clear Cell Focus                                 | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>7</b>   |
| Deformity  | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>   |
| Degeneration, Cystic                             | 1 1                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1.4</b> |
| Eosinophilic Focus                               | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>   |
| Fatty Change                                     | 1 4 4                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2.8</b> |
| Hepatodiaphragmatic Nodule                       | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>   |
| Infiltration Cellular, Mononuclear Cell          | 2 1 1 1 1 1 2 2 1 2 1 1 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1.4</b> |
| Infiltration Cellular, Polymorphonuclear         |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2.0</b> |
| Inflammation, Chronic Active                     |                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1.0</b> |
| Tension Lipidosis                                | 2                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2.0</b> |
| Vacuolization Cytoplasmic                        | 2                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2.1</b> |
| Bile Duct, Hyperplasia                           | 1 2 1 4 2 2 3 1 1 3 3 2 2 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2.0</b> |
| Biliary Tract, Cyst                              | X                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b>   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |    |    |    |    |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|
|  | 04          | 06 | 07 | 06 | 07 | 07 | 01 | 06 | 05 | 05 | 06 | 06 | 06 | 07 | 07 | 05 | 06 | 04 | 04 | 00 |          | 07 | 07 | 07 | 06 | 06 | 06 | 03 |
| ANIMAL ID  | 04          | 04 | 04 | 04 | 04 | 04 | 04 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08       | 08 | 08 | 08 | 08 | 08 | 08 |    |
| Biliary Tract, Fibrosis                            |             |    |    | 1  | 1  | 1  |    |    |    | 2  | 1  | 1  | 1  | 1  |    |    |    |    |    | 1  | 2        | 2  |    |    |    |    |    |    |
| Hepatocyte, Necrosis                               |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 1        |    |    |    |    |    |    |    |
| Oval Cell, Hyperplasia                             |             |    |    |    | 1  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    |    |
| Pancreas   | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | A  | +  | +  | +  | +  | +        | +  | +  | +  | +  | +  | +  | 46 |
| Basophilic Focus                                   |             |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 2  |
| Infiltration Cellular, Lymphocyte                  | 2           | 2  | 3  |    | 1  |    |    | 3  | 1  |    | 1  | 1  | 1  | 2  | 1  |    | 2  | 2  | 1  |    | 3        | 2  |    |    |    |    | 32 |    |
| Inflammation, Chronic Active                       |             |    | 1  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 2  |
| Lipomatosis  |             |    |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    |    |    |    | 3  |          |    |    |    |    |    |    | 7  |
| Pigmentation                                       | 1           |    | 2  |    | 1  |    |    |    |    |    |    |    |    | 1  |    |    |    | 2  | 2  |    | 2        |    |    |    |    |    | 19 |    |
| Polyarteritis                                      |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Acinus, Degeneration                               | 3           | 3  | 4  |    | 2  | 1  | 1  | 3  | 2  |    | 2  | 1  | 2  | 3  | 1  |    | 2  | 3  | 2  |    | 3        | 4  |    |    |    |    | 36 |    |
| Duct, Dilatation                                   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Stomach, Forestomach                               | +           | +  |    | +  |    |    | +  | +  | +  | +  | +  | +  | +  | +  |    | A  | +  | +  | +  | +  |          |    |    |    | +  |    | 31 |    |
| Fibrosis   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Inflammation, Chronic Active                       |             |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 3  |
| Ulcer  |             |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 2  |
| Epithelium, Hyperplasia                            |             |    |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 3  |
| Stomach, Glandular                                 | +           | +  |    | +  |    |    | +  | +  | +  | +  | +  | +  | +  |    |    | A  | +  | +  | +  | +  |          |    |    | +  |    |    | 30 |    |
| Inflammation, Chronic Active                       |             |    |    |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Mineralization                                     |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    | 2  |    |    |    |    | 1  |
| Necrosis   |             |    |    |    |    |    |    |    |    |    |    |    |    | 2  |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Epithelium, Hyperplasia                            |             |    |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |          |    |    |    |    |    |    | 1  |
| Tongue   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    | +  |    | 1  |
| Epithelium, Hyperplasia                            |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    | 3  |    |    | 1  |

**CARDIOVASCULAR SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>4<br>6<br>2      | 0<br>6<br>5<br>0      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>4      | 0<br>1<br>7<br>7      | 0<br>6<br>4<br>7      | 0<br>5<br>4<br>0      | 0<br>5<br>9<br>6      | 0<br>6<br>3<br>9      | 0<br>6<br>9<br>4      | 0<br>6<br>7<br>9      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>3      | 0<br>5<br>5<br>4      | 0<br>6<br>8<br>4      | 0<br>4<br>5<br>3      | 0<br>4<br>9<br>0      | 0<br>7<br>7<br>6      |                       | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>3      |
| ANIMAL ID  | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>2<br>2 | 0<br>4<br>5<br>3<br>1 | 0<br>4<br>5<br>3<br>2 | 0<br>4<br>5<br>5<br>1 | 0<br>4<br>5<br>5<br>2 | 0<br>6<br>6<br>4<br>1 | 0<br>6<br>6<br>4<br>2 | 0<br>6<br>6<br>5<br>1 | 0<br>6<br>6<br>5<br>2 | 0<br>6<br>6<br>6<br>1 | 0<br>6<br>6<br>6<br>2 | 0<br>6<br>6<br>7<br>1 | 0<br>6<br>6<br>7<br>2 | 0<br>8<br>4<br>7<br>1 | 0<br>8<br>4<br>7<br>2 | 0<br>8<br>4<br>8<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>4<br>9<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>5<br>0<br>1 | 0<br>8<br>5<br>0<br>2 |
| Blood Vessel Mineralization                        | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |
| Polyarteritis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |
| Thrombosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |
| Heart  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |
| Cardiomyopathy                                     | 2                     | 1                     | 2                     | 2                     | 2                     | 1                     |                       | 1                     | 2                     | 2                     | 2                     | 1                     | 1                     | 2                     | 3                     | 2                     | 2                     | 3                     | 1                     |                       | 1                     | 2                     | 44                    |
| Metaplasia, Osseous                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       | 3                     |
| Mineralization                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |
| Thrombosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |
| <b>ENDOCRINE SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Adrenal Cortex                                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |
| Degeneration, Cystic                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       |                       |                       |                       | 6                     |
| Hyperplasia  |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       |                       |                       | 9                     |
| Vacuolization Cytoplasmic                          |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       |                       | 2                     | 3                     | 3                     |                       |                       | 2                     |                       |                       |                       | 1                     | 12                    |
| Adrenal Medulla                                    | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |
| Hyperplasia  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     | 3                     |
| Islets, Pancreatic                                 | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | 46                    |
| Hyperplasia  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |
| Parathyroid Gland                                  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | 46                    |
| Hyperplasia  |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 1                     | 1                     |                       |                       |                       |                       |                       | 2                     | 11                    |
| Pituitary Gland                                    | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |
| Angiectasis  |                       |                       | 4                     |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       | 4                     |                       |                       |                       |                       | 11                    |
| Pars Distalis, Cyst                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
|  | 0462        | 0650 | 0727 | 0614 | 0728 | 0774 | 0167 | 0554 | 0559 | 0663 | 0669 | 0674 | 0677 | 0522 | 0523 | 0544 | 0643 | 0645 | 0700 | 0726 |          | 0726 |
| ANIMAL ID  | 0451        | 0452 | 0453 | 0454 | 0455 | 0456 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466     | 0466 |

|  |   |   |   |   |   |   |   |     |
|--|---|---|---|---|---|---|---|-----|
| Pars Distalis, Hyperplasia               | 3 | 3 | 2 | 3 | 3 | 4 | 9 | 2.7 |
| Pars Distalis, Hypertrophy               |   | 1 |   |   |   |   | 2 | 2.0 |
| Pars Distalis, Vacuolization Cytoplasmic |   |   |   |   |   |   | 1 | 1.0 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | A | + | A | + | + | + | 40 |    |     |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |    |    | 4   |
| C-cell, Hyperplasia          |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 | 1 |   |   |   |   |   |   |   |   |    | 13 | 1.7 |
| Follicular Cell, Hyperplasia |   |   |   |   |   |   | 2 |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |    | 2  | 2.5 |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Coagulating Gland                 | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 46 |    |     |     |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   | 4 |    | 2  | 3.5 |     |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |    |    | 1   |     |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |    |     |     |
| Exfoliated Germ Cell              |   | 1 |   |   |   |   |   |   |   |   | 2 |   | 1 |   |   |   |   |   |   |   |   | 4 |    | 8  | 1.6 |     |
| Hypospermia                       |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   |   | 4 | 4 |   |   |   |   | 4 |    | 11 | 3.9 |     |
| Infiltration Cellular, Lymphocyte |   |   | 1 |   |   | 1 |   |   |   | 1 |   |   |   |   | 1 |   |   | 1 |   |   |   |   |    | 12 | 1.0 |     |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |    | 1  | 3.0 |     |
| Fat Pad, Epididymal               |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |    |     |     |
| Necrosis                          |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 2   | 4.0 |
| Preputial Gland                   |   | + |   |   | + | + |   |   | + | + |   |   |   | + | + |   |   |   |   |   | + |   | 15 |    |     |     |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
|  | 0<br>4<br>6<br>2      | 0<br>6<br>5<br>0      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>4      | 0<br>1<br>7<br>7      | 0<br>6<br>4<br>7      | 0<br>5<br>4<br>0      | 0<br>5<br>9<br>6      | 0<br>6<br>3<br>9      | 0<br>6<br>9<br>4      | 0<br>6<br>7<br>9      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>3      | 0<br>5<br>5<br>4      | 0<br>6<br>8<br>4      | 0<br>4<br>5<br>3      | 0<br>4<br>9<br>0      | 0<br>7<br>7<br>6      |                       | 0<br>2<br>2<br>6      | 0<br>7<br>2<br>6      | 0<br>6<br>5<br>3 |
| ANIMAL ID  | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>2<br>2 | 0<br>4<br>5<br>2<br>2 | 0<br>4<br>5<br>3<br>1 | 0<br>4<br>5<br>3<br>2 | 0<br>4<br>5<br>5<br>1 | 0<br>4<br>5<br>5<br>2 | 0<br>6<br>6<br>4<br>1 | 0<br>6<br>6<br>4<br>2 | 0<br>6<br>6<br>5<br>1 | 0<br>6<br>6<br>5<br>2 | 0<br>6<br>6<br>6<br>1 | 0<br>6<br>6<br>6<br>2 | 0<br>6<br>6<br>7<br>1 | 0<br>6<br>6<br>7<br>2 | 0<br>8<br>4<br>7<br>1 | 0<br>8<br>4<br>7<br>2 | 0<br>8<br>4<br>8<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>4<br>9<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>5<br>0<br>1 | 0<br>8<br>5<br>0<br>2 |                  |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0            |
| Hyperkeratosis                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       | 4 4.0            |
| Inflammation, Suppurative                          |                       | 4                     |                       |                       | 4                     | 2                     |                       |                       | 4                     |                       | 4                     |                       |                       | 4                     |                       |                       |                       | 3                     |                       |                       | 3                     |                       |                       | 12 3.5           |
| Duct, Dilatation                                   |                       | 3                     |                       |                       | 4                     | 4                     |                       |                       | 4                     |                       | 4                     |                       |                       | 4                     |                       | 3                     |                       |                       | 4                     |                       | 3                     |                       |                       | 13 3.7           |
| Epithelium, Hyperplasia                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0            |
| Prostate, Dorsal/lateral Lobe                      | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |                  |
| Cyst, Mucinous                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       | X                     |                       |                       |                       |                       |                       |                       |                       | 2                |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5 3.0                 |                  |
| Infiltration Cellular, Lymphocyte                  |                       | 2                     | 1                     |                       | 1                     |                       |                       |                       | 3                     |                       |                       | 1                     | 1                     |                       | 1                     | 2                     | 1                     |                       |                       |                       | 1                     |                       | 26 1.3                |                  |
| Inflammation, Suppurative                          | 1                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 2                     | 4                     | 3                     | 3                     | 1                     | 3                     | 2                     | 3                     | 3                     | 2                     | 2                     | 2                     |                       | 2                     | 3                     | 2                     | 46 2.0           |
| Epithelium, Hyperplasia                            |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 4.0            |
| Prostate, Ventral Lobe                             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |                  |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 2 3.5            |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       | 4 2.0                 |                  |
| Infiltration Cellular, Lymphocyte                  | 1                     |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 2                     |                       | 1                     |                       |                       |                       |                       | 2                     | 1                     |                       |                       | 14 1.4                |                  |
| Inflammation, Suppurative                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       | 5 1.4                 |                  |
| Mineralization                                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |                  |
| Polyarteritis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 1.0                 |                  |
| Epithelium, Hyperplasia                            |                       | 2                     |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | 2                     |                       | 1                     |                       |                       | 3                     |                       | 2                     |                       |                       |                       | 12 2.3                |                  |
| Seminal Vesicle                                    | +                     | A                     | +                     | A                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | 42                    |                  |
| Atrophy  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 3 3.7            |
| Inflammation, Chronic Active                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1 2.0                 |                  |
| Epithelium, Hyperplasia                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       | 6 2.5                 |                  |
| Lumen, Dilatation                                  |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       | 2 4.0                 |                  |
| Testes   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |                  |
| Polyarteritis                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     | 4                     | 2                     |                       |                       |                       |                       | 1 3                   | 11 2.4           |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |     |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|-----|--|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0   |  |
| ANIMAL ID  | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6        | 30  |  |
|  | 5           | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6        | 2.2 |  |
|  | 1           | 2 | 2 | 3 | 3 | 5 | 5 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 1 | 2 | 8 | 8 | 9 | 9        |     |  |
|  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 2   |  |
| Seminiferous Tubule, Degeneration                  |             | 1 |   | 1 | 1 | 1 | 4 |   |   | 1 |   | 4 |   | 1 |   | 1 | 1 | 1 | 4 | 4 |          | 30  |  |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2.2 |  |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48  |
| Hypocellularity                               |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7   |
| Myeloid Cell, Hyperplasia                     |   |   |   |   | 3 |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4   |
| Lymph Node                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9   |
| Axillary, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4.0 |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 2   |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3.5 |
| Mediastinal, Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4   |
| Mediastinal, Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1   |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1   |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3.0 |
| Renal, Degeneration, Cystic                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1   |
| Renal, Hemorrhage                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 4   |
| Renal, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 6   |
| Lymph Node, Mandibular                        |   | + |   | + |   |   |   |   |   |   | + | + |   |   | + | + |   |   |   | + |   | 10  |
| Degeneration, Cystic                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3   |
| Hyperplasia, Lymphoid                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 7   |
| Infiltration Cellular, Plasma Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3.3 |
| Lymph Node, Mesenteric                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8   |
| Spleen  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Hematopoietic Cell Proliferation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 47  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |   |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|   | 0<br>4<br>6<br>2      | 0<br>6<br>5<br>0      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>4      | 0<br>1<br>7<br>7      | 0<br>6<br>4<br>7      | 0<br>5<br>4<br>0      | 0<br>5<br>9<br>6      | 0<br>6<br>3<br>9      | 0<br>6<br>9<br>4      | 0<br>6<br>7<br>9      | 0<br>7<br>2<br>5      | 0<br>7<br>3<br>4      | 0<br>5<br>8<br>4      | 0<br>4<br>5<br>3      | 0<br>4<br>9<br>0      | 0<br>7<br>7<br>6      | 0<br>2<br>2<br>6      |                       | 0<br>7<br>2<br>6      | 0<br>6<br>5<br>3      |   |
| ANIMAL ID   | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>2<br>2 | 0<br>4<br>5<br>3<br>1 | 0<br>4<br>5<br>3<br>2 | 0<br>4<br>5<br>5<br>1 | 0<br>4<br>5<br>5<br>2 | 0<br>6<br>6<br>4<br>1 | 0<br>6<br>6<br>5<br>2 | 0<br>6<br>6<br>4<br>1 | 0<br>6<br>6<br>5<br>6 | 0<br>6<br>6<br>6<br>2 | 0<br>6<br>6<br>6<br>1 | 0<br>6<br>6<br>7<br>2 | 0<br>6<br>6<br>7<br>1 | 0<br>8<br>4<br>7<br>2 | 0<br>8<br>4<br>8<br>1 | 0<br>8<br>4<br>8<br>2 | 0<br>8<br>4<br>8<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>5<br>0<br>1 | 0<br>8<br>5<br>0<br>2 |   |
| Hyperplasia, Lymphoid<br>Pigmentation<br>Polyarteritis  | 4                     | 3                     |                       | 2                     | 3                     |                       |                       |                       | 1                     | 3                     | 3                     | 3                     |                       | 2                     | 1                     |                       | 3                     | 2                     |                       |                       | 2                     | 2                     |                       | 1 2.0<br>28 2.3<br>1 2.0  |
| Thymus<br>Atrophy<br>Hemorrhage   | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 46<br>43 4.0<br>1 4.0   |
| <b>INTEGUMENTARY SYSTEM</b>   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Mammary Gland<br>Atypical Focus<br>Galactocele<br>Hyperplasia, Lobular<br>Alveolus, Degeneration<br>Alveolus, Dilatation<br>Duct, Dilatation  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48<br>1 2.0<br>1<br>1 2.0<br>22 3.5<br>17 2.5<br>18 2.8                                       |
| Skin<br>Abscess<br>Cyst, Squamous<br>Cyst Epithelial Inclusion<br>Fibrosis<br>Inflammation, Suppurative<br>Ulcer<br>Epithelium, Hyperplasia<br>Epithelium, Foot, Hyperplasia<br>Foot, Edema<br>Foot, Fibrosis<br>Foot, Inflammation, Chronic Active |                       |                       |                       |                       |                       |                       |                       | +                     | +                     | +                     |                       |                       |                       |                       |                       |                       | +                     | +                     |                       | +                     | +                     |                       |                       | 16<br>1 4.0<br>1<br>3<br>1 4.0<br>2 2.5<br>1 1.0<br>1 3.0<br>5 4.0<br>2 3.5<br>5 4.0<br>5 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|  | 0462        | 0650 | 0727 | 0614 | 0728 | 0774 | 0167 | 0554 | 0559 | 0663 | 0669 | 0664 | 0669 | 0775 | 0773 | 0522 | 0658 | 0445 | 0409 | 0076 |          | 0726 | 0776 |
| ANIMAL ID  | 0451        | 0452 | 0453 | 0454 | 0455 | 0456 | 0466 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666     | 0666 | 0666 |

|                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |     |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|-----|
| Foot, Necrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 | 4 | 4 | 4.0 |
| Foot, Ulcer    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 | 4 | 4 | 4.0 |

**MUSCULOSKELETAL SYSTEM**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Bone, Femur            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |   |     |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1 | 3.0 |

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |    |     |
| Compression               |   | 3 |   | 2 |   |   |   |   |   | 3 |   | 4 |   |   |   | 3 |   |   |   |   |   |   |    | 14 | 2.9 |
| Gliosis                   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 3.0 |
| Necrosis                  | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 3.0 |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |    |     |
| Compression               |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |    |     |
| Gliosis                   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  | 2.5 |
| Necrosis                  | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  | 2.5 |
| Ventricle, Dilatation     |   | 2 |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |    | 10 | 1.5 |
| Nerve Trigeminal          |   |   |   | + |   |   |   | + |   | + |   | + |   | + |   |   |   |   |   |   |   |   | 6  |    |     |
| Axon, Degeneration        |   |   | 1 |   |   |   |   | 1 |   | 1 |   |   |   | 2 |   |   |   |   |   |   |   |   |    | 4  | 1.3 |
| Peripheral Nerve, Sciatic |   |   | + |   |   |   |   | + |   | + |   | + |   | + |   |   |   |   |   |   |   |   | 6  |    |     |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |
| Peripheral Nerve, Tibial  |   |   | + |   |   |   |   | + |   | + |   | + |   | + |   |   |   |   |   |   |   |   | 6  |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>4<br>6<br>2      | 0<br>6<br>5<br>0      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>4      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>4      | 0<br>1<br>7<br>7      | 0<br>6<br>4<br>7      | 0<br>5<br>4<br>0      | 0<br>5<br>9<br>6      | 0<br>6<br>3<br>9      | 0<br>6<br>9<br>4      | 0<br>6<br>7<br>9      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>3      | 0<br>5<br>5<br>4      | 0<br>6<br>8<br>4      | 0<br>4<br>5<br>3      | 0<br>4<br>9<br>0      | 0<br>7<br>7<br>6      |                       | 0<br>7<br>2<br>6      | 0<br>6<br>5<br>3      |
| ANIMAL ID  | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>1<br>2 | 0<br>4<br>5<br>2<br>2 | 0<br>4<br>5<br>3<br>1 | 0<br>4<br>5<br>3<br>2 | 0<br>4<br>5<br>5<br>1 | 0<br>4<br>5<br>5<br>2 | 0<br>6<br>6<br>4<br>1 | 0<br>6<br>6<br>4<br>2 | 0<br>6<br>6<br>5<br>1 | 0<br>6<br>6<br>5<br>2 | 0<br>6<br>6<br>6<br>1 | 0<br>6<br>6<br>6<br>2 | 0<br>6<br>6<br>7<br>1 | 0<br>6<br>6<br>7<br>2 | 0<br>8<br>4<br>7<br>1 | 0<br>8<br>4<br>7<br>2 | 0<br>8<br>4<br>8<br>1 | 0<br>8<br>4<br>8<br>2 | 0<br>8<br>4<br>9<br>1 | 0<br>8<br>4<br>9<br>2 | 0<br>8<br>5<br>0<br>1 | 0<br>8<br>5<br>0<br>2 |

|   |  |  |   |   |  |  |  |   |  |  |  |   |  |  |   |  |  |  |  |  |  |  |  |            |
|---|--|--|---|---|--|--|--|---|--|--|--|---|--|--|---|--|--|--|--|--|--|--|--|------------|
| Spinal Cord, Cervical                     |  |  | + |   |  |  |  | + |  |  |  | + |  |  | + |  |  |  |  |  |  |  |  | 6          |
| Spinal Cord, Lumbar<br>Axon, Degeneration |  |  |   | + |  |  |  | + |  |  |  | + |  |  | + |  |  |  |  |  |  |  |  | 6<br>5 2.0 |
| Spinal Cord, Thoracic                     |  |  | + |   |  |  |  | + |  |  |  | + |  |  | + |  |  |  |  |  |  |  |  | 6          |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Lung  | + | + |   | + |   |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39     |
| Congestion  |   |   |   |   |   |  | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4.0  |
| Foreign Body  |   |   | X |   |   |  |   |   |   |   |   | X |   |   |   |   |   | X |   | X |   |   | 5      |
| Infiltration Cellular, Histiocyte                   |   |   |   |   | 1 |  |   |   | 2 |   |   |   |   | 2 |   |   |   | 2 |   | 2 |   |   | 10 1.8 |
| Inflammation, Granulomatous                         |   |   | 2 |   |   |  |   |   |   |   |   |   | 4 |   |   |   |   |   | 2 |   |   |   | 4 2.8  |
| Inflammation, Chronic Active                        |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Bronchiole, Epithelium, Hyperplasia                 |   |   |   |   |   |  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Goblet Cell, Metaplasia                             |   |   |   |   |   |  |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Pleura, Foreign Body                                |   |   |   |   |   |  |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | 1      |
| Pleura, Inflammation, Suppurative                   |   |   |   |   |   |  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Pleura, Necrosis                                    |   |   |   |   |   |  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Nose  | + | + |   | + |   |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 32     |
| Autolysis   |   |   |   |   |   |  |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   | 4 4.0  |
| Fibrous Osteodystrophy                              |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1 3.0  |
| Foreign Body  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   | 4      |
| Inflammation, Suppurative                           |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   | 4 1.5  |
| Inflammation, Chronic Active                        |   |   |   |   |   |  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   |   | 2 |   |   |  |   | 2 |   |   |   |   | 3 |   |   |   |   | 2 | 3 |   |   | 2 | 13 2.5 |
| Olfactory Epithelium, Hyperplasia                   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|   |             |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 2.5 BPA M</b> | DAY ON TEST | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 4               | 6 | 7 | 6 | 7 | 7 | 1 | 6 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 5 | 6 | 4 | 4 | 0 | 7 | 7 | 6 |
|   |             | 6               | 5 | 2 | 1 | 2 | 2 | 7 | 4 | 4 | 9 | 3 | 9 | 7 | 2 | 2 | 5 | 8 | 5 | 9 | 7 | 2 | 2 | 5 |
|   | 2           | 0               | 7 | 4 | 8 | 4 | 7 | 7 | 0 | 6 | 9 | 4 | 9 | 5 | 3 | 4 | 4 | 3 | 0 | 6 | 6 | 6 | 3 |   |
|   | ANIMAL ID   | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 4               | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |
|   |             | 5               | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |   |
|   |             | 1               | 2 | 2 | 3 | 3 | 5 | 5 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 |   |
|   |             | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |   |
|   |             | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|  |           |   |  |  |  |  |  |   |   |   |   |   |   |   |  |  |   |   |   |   |   |              |              |
|--|-----------|---|--|--|--|--|--|---|---|---|---|---|---|---|--|--|---|---|---|---|---|--------------|--------------|
| Respiratory Epithelium, Accumulation, Hyaline Droplet  | 2         |   |  |  |  |  |  |   |   |   |   |   |   |   |  |  |   |   |   |   |   | <b>5 2.0</b> |              |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |           |   |  |  |  |  |  |   |   |   |   |   |   |   |  |  |   |   |   |   |   | <b>3</b>     | <b>2 2.5</b> |
| Transitional Epithelium, Accumulation, Hyaline Droplet |           |   |  |  |  |  |  |   |   |   |   |   |   |   |  |  |   |   |   |   |   | <b>1</b>     | <b>4.0</b>   |
| Trachea  | +         | + |  |  |  |  |  | A | + | + | A | + | + | + |  |  | A | + | A | + | + |              | +            |
|  | <b>23</b> |   |  |  |  |  |  |   |   |   |   |   |   |   |  |  |   |   |   |   |   |              |              |

**SPECIAL SENSES SYSTEM**

|                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |              |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|--------------|
| Eye                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> |              |
| Cataract           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>4</b> | <b>1 4.0</b> |
| Retinal Detachment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>X</b> | <b>1</b>     |

**URINARY SYSTEM**

|   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |     |   |           |          |            |  |
|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|-----|---|-----|---|-----------|----------|------------|--|
| Kidney  | + | + | + | + | +   | + | + | + | + | + | + | + | + | + | + | + | +   | + | +   | + | +         | +        | +          |  |
| Infiltration Cellular, Polymorphonuclear Mineralization |   |   |   |   | 2   |   |   |   |   |   | 2 |   | 1 |   |   |   |     |   | 2   |   | <b>48</b> |          |            |  |
| Nephropathy   | 1 | 1 | 3 | 1 | 1   | 3 |   | 1 | 2 | 1 | 4 | 3 | 4 | 4 | 4 | 3 | 2   |   | 4   | 4 | 4         |          |            |  |
| Cortex, Cyst  |   |   |   |   | X X |   |   |   |   |   | X |   |   |   |   |   | X   |   | X   |   | X         |          | <b>15</b>  |  |
| Renal Tubule, Cyst                                      |   |   |   |   | X   |   |   |   |   |   | X |   |   |   |   |   | X X |   | X X |   | X X       |          | <b>13</b>  |  |
| Transitional Epithelium, Hyperplasia                    |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |     |   |           | <b>4</b> | <b>1.8</b> |  |
| Urinary Bladder   |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |     |   |           | <b>1</b> |            |  |
| Calculus Micro Observation Only                         |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |     |   |           | <b>1</b> | <b>1</b>   |  |
| Lumen, Dilatation                                       |   |   |   |   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |     |   |           | <b>1</b> | <b>4.0</b> |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                              | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| <b>SPRAGUE DAWLEY (NCTR)</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |
| <b>RATS MALE</b>             | 6           | 5 | 7 | 7 | 5 | 4 | 7 | 3 | 6 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 4 | 6 |                    | 6 |
| <b>F1 25.0 BPA M</b>         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  |   |
|                              | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  |   |
| <b>ANIMAL ID</b>             | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6                  |   |
|                              | 3           | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 9 | 9 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 6 | 7 | 7                  |   |
|                              | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  |   |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                               | + | + |   |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Intestine Large, Colon                  | + | + |   |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Intestine Small, Ileum                  | + | A |   |   | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Intestine Small, Jejunum Dilatation     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 4 |  |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |  |
| Basophilic Focus                        | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Cholangiofibrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Congestion                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fatty Change                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Mononuclear Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Vacuolization Cytoplasmic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bile Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Capsule, Fibrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   |  | 0667        | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  |                    |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M |  | ANIMAL ID   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|   |  | 00331       | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 | 00331 |                    |
| Hepatocyte, Necrosis                                |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Mesentery   |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Fat, Fibrosis                                       |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | +                  |
| Fat, Inflammation, Granulomatous                    |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Fat, Necrosis                                       |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |
| Oral Mucosa   |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pancreas  |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Basophilic Focus                                    |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Infiltration Cellular, Lymphocyte                   |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Lipomatosis   |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pigmentation  |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Acinus, Degeneration                                |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Stomach, Forestomach                                |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Cyst Epithelial Inclusion Epithelium, Hyperplasia   |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Stomach, Glandular                                  |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Cyst Epithelial Inclusion                           |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Mineralization                                      |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Epithelium, Hyperplasia                             |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |

**CARDIOVASCULAR SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mineralization       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Media, Proliferation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST | 0667 | 0569 | 0727 | 0727 | 0589 | 0496 | 0731 | 0344 | 0673 | 0643 | 0726 | 0778 | 0588 | 0577 | 0728 | 0657 | 0578 | 0728 | 0548 | 0728 | 0779 | 0485 | 0681 | 0691 | males<br>(cont...) |
|   | ANIMAL ID   | 0033 | 0034 | 0041 | 0042 | 0051 | 0052 | 0061 | 0062 | 0071 | 0072 | 0081 | 0082 | 0091 | 0092 | 0101 | 0102 | 0111 | 0112 | 0121 | 0122 | 0131 | 0132 | 0141 | 0142 |                    |
|   |             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    |                    |

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | 4 | 2 | 3 | 2 | 1 |   | 1 | 1 | 3 | 2 | 2 | 2 | 3 | 1 | 3 | 2 |   | 1 | 3 | 2 |   | 2 | 2 | 2 | 3 |
| Mineralization |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Thrombosis     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |
| Hyperplasia                       | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 |   |   |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic         |   |   |   | 1 |   |   |   |   |   | 2 |   | 2 |   | 2 |   | 2 |   | 1 |   |   |   | 2 |   | 1 | 2 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       |   | 1 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       | 2 |   | 2 |   | 4 |   |   |   | 3 |   | 2 | 2 |   |   | 4 | 2 |   |   |   |   |   |   | 2 |   | 3 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                       |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |
| Pars Distalis, Cyst               |   |   |   |   | X |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia        | 1 |   | 2 | 1 |   | 2 |   |   |   |   | 4 | 2 | 1 |   | 2 |   |   |   |   |   |   |   |   | 1 | 4 |
| Pars Distalis, Hypertrophy        |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | ANIMAL ID | males<br>(cont...) |             |             |             |             |             |             |             |             |             |             |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   | 0667<br>667 | 0566<br>566 | 0722<br>722 | 0722<br>722 | 0589<br>589 | 0496<br>496 | 0771<br>771 | 0394<br>394 | 0673<br>673 | 0413<br>413 | 0722<br>722 | 0722<br>722 | 0722<br>722 | 0588<br>588 | 0577<br>577 | 0722<br>722 | 0688<br>688 | 0577<br>577 | 0722<br>722 | 0548<br>548 | 0722<br>722 | 0722<br>722 | 0722<br>722 | 0488<br>488 |           |                    | 0722<br>722 | 0722<br>722 | 0488<br>488 | 0722<br>722 | 0488<br>488 | 0488<br>488 | 0488<br>488 | 0488<br>488 | 0488<br>488 | 0488<br>488 |
|   | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      |           |                    | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      | 003331      |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thyroid Gland                | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ultimobranhial Cyst          |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          | 2 |   | 1 | 1 | 2 |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicular Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Coagulating Gland<br>Lumen, Dilatation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Ductus Deferens<br>Granuloma Sperm     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epididymis<br>Exfoliated Germ Cell     | + | + | + | + | + | + | + | + | 2 | + | + | + | + | + | + | + | + | + | 2 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Hypoplasia                             |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hypospermia                            |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte      | 1 |   | 1 |   |   |   | 1 |   |   |   |   |   | 1 | 2 | 1 |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |
| Polyarteritis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Spermatocele                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Preputial Gland<br>Atrophy             | + |   | + |   |   | + |   |   |   | + |   | + | + |   |   | + |   | + |   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibrosis                               |   |   | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hyperkeratosis                         |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative              |   |   |   |   |   |   |   |   | 4 |   |   | 2 | 4 |   |   |   |   | 2 |   | 3 |   |   | 3 |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |       |       |       |       |       |       |      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|   | 0667        | 0669  | 0727  | 0777  | 0589  | 0496  | 0731  | 0394  | 0673  | 0443  | 0776  | 0778  | 0778  | 0588  | 0577  | 0728  | 0688  | 0577  | 0748  | 0728  |                    | 0778  | 0429  | 0775  | 0481  | 0669  | 0445  | 0446  | 0446  | 0446  | 0447 |
| ANIMAL ID   | 00331       | 00332 | 00334 | 00342 | 00355 | 00356 | 00366 | 00367 | 00377 | 00379 | 00399 | 00402 | 00404 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405              | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 | 00405 |      |
| Duct, Dilatation                                    | 4           |       |       |       |       |       |       | 4     |       | 4     | 4     |       |       | 3     |       | 4     |       | 4     | 4     |       |                    |       |       |       |       |       |       |       |       |       |      |
| Prostate, Dorsal/lateral Lobe                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     | +     |      |
| Cyst, Mucinous                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Fibrosis  |             |       |       |       | 2     |       |       |       |       |       |       | 3     |       |       |       |       |       | 2     |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Infiltration Cellular, Lymphocyte                   | 1           | 1     | 1     |       | 1     |       | 1     |       | 1     |       | 1     | 1     |       |       |       |       | 2     | 1     | 2     | 1     | 1                  |       |       | 2     | 1     |       |       |       |       |       |      |
| Inflammation, Suppurative                           | 2           | 2     | 2     | 2     | 3     | 2     | 2     | 2     | 2     | 1     | 2     |       |       | 2     | 1     | 2     | 2     | 2     | 2     | 1     | 2                  | 3     | 2     | 2     | 1     | 1     |       |       |       |       |      |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Prostate, Ventral Lobe                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     | +     |      |
| Atrophy   |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |                    |       |       |       |       |       |       |       |       |       |      |
| Fibrosis  | 1           |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     | 1     |       | 1     |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Infiltration Cellular, Lymphocyte                   |             |       | 1     |       |       | 1     | 1     | 1     |       | 1     |       |       |       | 1     | 2     | 1     |       | 1     |       |       |                    | 1     |       |       |       |       |       |       |       |       |      |
| Inflammation, Suppurative                           |             |       | 2     |       |       |       | 1     |       | 1     |       |       |       |       |       | 1     | 1     | 2     |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Epithelium, Hyperplasia                             | 2           | 3     |       |       |       | 3     | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       | 2     |       |       |       |       |       |       |      |
| Seminal Vesicle                                     | +           | A     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     | +     |      |
| Atrophy   |             |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       | 2     |       |       | 2                  |       |       |       |       |       |       |       |       |       |      |
| Lumen, Dilatation                                   |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 4     |       |                    |       | 2     |       |       |       |       |       |       |       |      |
| Testes  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     | +     |      |
| Edema   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |       |      |
| Polyarteritis                                       |             |       |       |       |       |       | 4     |       | 3     |       | 2     | 2     |       |       | 4     | 1     |       |       |       | 4     |                    |       |       | 2     |       |       |       |       |       |       | 4    |
| Semiferous Tubule, Degeneration                     |             |       | 4     | 1     | 1     |       | 4     | 1     | 2     |       | 4     | 1     |       |       | 4     | 2     | 1     | 4     |       | 2     | 4                  |       |       | 1     | 4     | 2     | 3     |       |       |       |      |

HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|   |  | DAY ON TEST |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |       |       |       |       |       |
|---|--|-------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M |  | 06677       | 05669  | 07277 | 07277 | 05896 | 04901 | 07343 | 03633 | 06413 | 07726 | 07726 | 07726 | 05888 | 05577 | 07288 | 06577 | 05748 | 07728 | 07728 | 07728 | 07728 | 07728 | 04888 | 04888 |                    | 04888 | 04888 | 04888 | 06888 | 06888 | 06888 | 06888 | 06888 |
| ANIMAL ID   |  | 003331      | 003341 | 00342 | 00351 | 00362 | 00371 | 00382 | 00391 | 00402 | 00412 | 00422 | 00432 | 00442 | 00452 | 00462 | 00472 | 00482 | 00492 | 00502 | 00512 | 00522 | 00532 | 00542 | 00552 |                    | 00562 | 00572 | 00582 | 00592 | 00602 | 00612 | 00622 | 00632 |

|                           |   |
|---------------------------|---|
| Bone Marrow               | + |
| Hypocellularity           | 3 3   |
| Myeloid Cell, Hyperplasia | 4 4   |

|   |       |
|---|-------|
| Lymph Node                                    | + + + |
| Cervical, Hyperplasia, Lymphoid               | 2     |
| Cervical, Infiltration Cellular, Plasma Cell  | 3     |
| Lumbar, Degeneration, Cystic                  | 4     |
| Lumbar, Hyperplasia, Lymphoid                 | 4     |
| Lumbar, Infiltration Cellular, Plasma Cell    | 4     |
| Pancreatic, Hyperplasia, Lymphoid             | 2     |
| Pancreatic, Infiltration Cellular, Histiocyte | 3     |
| Renal, Degeneration, Cystic                   | 4 3   |
| Renal, Hemorrhage                             | 4     |
| Renal, Hyperplasia, Lymphoid                  | 3     |
| Renal, Infiltration Cellular, Plasma Cell     |       |

|                                    |       |
|------------------------------------|-------|
| Lymph Node, Mandibular             | + + + |
| Degeneration, Cystic               | 2 2   |
| Hyperplasia, Lymphoid              | 4 3   |
| Infiltration Cellular, Plasma Cell | 4 4   |

|                        |  |
|------------------------|--|
| Lymph Node, Mesenteric |  |
| Degeneration, Cystic   |  |
| Hemorrhage             |  |

|                                  |   |
|----------------------------------|---|
| Spleen                           | + |
| Hematopoietic Cell Proliferation | 1 2   |
| Pigmentation                     | 3 2 1 2 3 2 1 4 4 1 1 2 2 1 3 2 3 1           |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                    |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| DAY ON TEST                        | 0<br>6<br>6<br>7      | 0<br>5<br>6<br>9      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>5<br>8<br>9      | 0<br>4<br>9<br>6      | 0<br>7<br>0<br>1      | 0<br>3<br>9<br>4      | 0<br>6<br>7<br>3      | 0<br>4<br>1<br>3      | 0<br>7<br>2<br>6      | 0<br>7<br>2<br>0      | 0<br>7<br>2<br>8      | 0<br>5<br>8<br>8      | 0<br>5<br>7<br>7      | 0<br>6<br>8<br>8      | 0<br>5<br>7<br>7      | 0<br>5<br>4<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>4<br>8<br>8      | 0<br>4<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>4<br>2<br>9      | 0<br>7<br>8<br>5      | 0<br>4<br>1<br>9      |                       |                       |                       |                    |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                    |
| F1 25.0 BPA M                      | 0<br>0<br>3<br>3<br>1 | 0<br>0<br>3<br>3<br>2 | 0<br>0<br>3<br>4<br>1 | 0<br>0<br>3<br>4<br>2 | 0<br>0<br>3<br>5<br>1 | 0<br>0<br>3<br>5<br>2 | 0<br>0<br>3<br>6<br>1 | 0<br>0<br>3<br>7<br>2 | 0<br>0<br>3<br>7<br>1 | 0<br>0<br>3<br>7<br>2 | 0<br>2<br>4<br>9<br>1 | 0<br>2<br>4<br>9<br>1 | 0<br>2<br>4<br>9<br>1 | 0<br>2<br>5<br>9<br>2 | 0<br>2<br>5<br>9<br>2 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>5<br>9<br>2 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>5<br>9<br>2 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>3<br>3<br>2 | 0<br>2<br>3<br>3<br>2 | 0<br>4<br>3<br>5<br>1 | 0<br>4<br>3<br>5<br>2 | 0<br>4<br>6<br>5<br>1 | 0<br>4<br>6<br>6<br>2 | 0<br>4<br>6<br>6<br>7 | 0<br>4<br>6<br>6<br>1 | 0<br>4<br>6<br>7<br>1 | males<br>(cont...) |

|            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + |   |
| Atrophy    | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Hemorrhage |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Galactoceles                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lobular               |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Alveolus, Degeneration             |   |   | 3 | 4 |   |   | 4 |   |   | 2 |   | 2 |   | 3 | 4 |   |   | 4 | 4 |   |   |   |   | 2 |   |   | 3 |   | 2 |   |
| Alveolus, Dilatation               |   |   |   |   |   | 2 |   |   | 2 |   | 2 |   |   |   |   |   |   | 3 | 3 | 3 |   |   |   | 3 |   |   |   |   |   |   |
| Duct, Dilatation                   |   |   | 2 |   |   | 3 |   |   | 3 |   | 2 |   |   |   |   |   | 4 | 3 | 3 |   |   |   | 3 |   |   |   |   |   |   | 2 |
| Skin                               |   |   |   | + |   | + |   |   |   | + |   |   |   |   |   |   |   |   |   |   | + |   |   |   | + |   |   | + | X |   |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foot, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Foot, Inflammation, Chronic Active |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foot, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foot, Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**MUSCULOSKELETAL SYSTEM**

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Joint, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Joint, Hyperostosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Joint, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Bone, Femur                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically                          M .. Missing tissue    1-4 .. Lesion qualified as:  
X .. Lesion present    A .. Autolysis precludes evaluation    1) Minimal 3) Moderate  
I .. Insufficient tissue    BLANK .. Not examined microscopically    2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                    |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |   |
|------------------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE | ANIMAL ID | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 | 0 |   |   |
|                                    |           | 6           | 5 | 7 | 7 | 5 | 4 | 7 | 3 | 6 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 7 | 5 |                    | 7 | 7 | 4 | 6 |
| F1 25.0 BPA M                      |           | 6           | 6 | 2 | 2 | 8 | 9 | 0 | 9 | 7 | 1 | 2 | 2 | 2 | 8 | 7 | 2 | 8 | 7 | 2 | 4 | 2                  | 2 | 8 | 1 |   |
|                                    |           | 7           | 9 | 7 | 7 | 9 | 6 | 1 | 4 | 3 | 3 | 6 | 0 | 8 | 7 | 9 | 8 | 7 | 7 | 8 | 8 | 8                  | 9 | 5 | 9 |   |
|                                    |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 |   |
|                                    |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4                  | 4 | 4 | 4 | 4 |
|                                    |           | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6                  | 6 | 6 | 6 |   |
|                                    |           | 3           | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5                  | 6 | 6 | 7 |   |
|                                    |           | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 2 |   |

Fibrous Osteodystrophy

4

Skeletal Muscle

NERVOUS SYSTEM

Brain, Brain Stem  
Compression

+  
3 3 2 2 4 1 2

Brain, Cerebellum  
Gliosis  
Hemorrhage  
Necrosis  
Polyarteritis

+  
2  
2  
1

Brain, Cerebrum  
Gliosis  
Necrosis  
Polyarteritis  
Ventricle, Dilatation

+  
2  
2  
1  
1 1 1 1

Nerve Trigeminal  
Axon, Degeneration

+  
1

Peripheral Nerve, Sciatic

+

Peripheral Nerve, Tibial

+

Spinal Cord, Cervical

+

Spinal Cord, Lumbar

+

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                  |   |  |   |
|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------|---|--|---|
| DAY ON TEST                              |  | 6 | 5 | 7 | 7 | 5 | 4 | 7 | 3 | 6 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 4 | 6                |   |  |   |
| SPRAGUE DAWLEY (NCTR)                    |  | 6 | 6 | 2 | 2 | 8 | 9 | 0 | 9 | 7 | 1 | 2 | 2 | 2 | 8 | 7 | 2 | 8 | 7 | 2 | 4 | 2 | 2 | 8 | 1                |   |  |   |
| RATS MALE                                |  | 7 | 9 | 7 | 7 | 9 | 6 | 1 | 4 | 3 | 3 | 6 | 0 | 8 | 7 | 9 | 8 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9                |   |  |   |
| F1 25.0 BPA M                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| ANIMAL ID                                |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                |   |  |   |
|  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4                |   |  |   |
|  |  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6                |   |  |   |
|  |  | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7                |   |  |   |
|  |  | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2                |   |  |   |
|  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>males</b>     |   |  |   |
|  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>(cont...)</b> |   |  |   |
| Accumulation, Hyaline Droplet            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Casts Protein                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Infarct                                  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Infiltration Cellular, Polymorphonuclear |  |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   | 2                |   |  |   |
| Mineralization                           |  |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Nephropathy                              |  | 2 | 4 | 3 | 2 | 4 |   | 4 | 1 | 4 | 1 | 4 | 4 | 3 | 1 | 4 | 4 | 1 | 1 | 4 | 1 | 2 | 4 | 3 | 2                | 4 |  |   |
| Polyarteritis                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3                |   |  |   |
| Thrombosis                               |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Cortex, Cyst                             |  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X | X | X |   |   |                  |   |  | X |
| Pelvis, Dilatation                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                  |   |  |   |
| Renal Tubule, Cyst                       |  |   |   |   |   | X | X |   |   |   |   | X | X |   |   |   |   |   |   | X |   |   |   |   | X                |   |  |   |
| Renal Tubule, Hyperplasia, Atypical      |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |                  |   |  |   |
| Transitional Epithelium, Hyperplasia     |  |   |   |   |   | 1 |   |   |   |   | 1 | 2 |   |   |   |   |   |   | 2 |   |   |   |   | 1 |                  |   |  |   |
| Urinary Bladder                          |  |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   | +                |   |  |   |
| Lumen, Dilatation                        |  |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 4                |   |  |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|  | DAY ON TEST     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 25.0 BPA M</b> | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |  |
|  | 5               | 3 | 5 | 5 | 7 | 7 | 6 | 4 | 5 | 7 | 7 | 5 | 4 | 6 | 6 | 7 | 6 | 2 | 5 | 7 | 7 | 5 | 7 |  |
|  | 6               | 3 | 8 | 1 | 2 | 2 | 7 | 7 | 7 | 2 | 2 | 4 | 8 | 5 | 5 | 2 | 1 | 8 | 6 | 2 | 8 | 8 | 3 |  |
|  | 0               | 9 | 0 | 0 | 8 | 6 | 9 | 7 | 3 | 5 | 5 | 0 | 9 | 9 | 0 | 7 | 8 | 5 | 2 | 8 | 8 | 3 | 7 |  |
|  | ANIMAL ID       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  | 4               | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |  |
|  | 6               | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |  |
|  | 7               | 8 | 8 | 8 | 9 | 9 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 |  |
|  | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 |  |
|  | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           |            |            |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|-----------|------------|------------|
| Esophagus                               | + | + | + | + |   |   | + | + | + |   |   | + | + | + | + |   |   | + | + | + |   |   |          |           | <b>31</b>  |            |
| Intestine Large, Colon                  | + | A | + | + |   |   | + | + | + |   |   | + | + | + | + |   |   | + | + | + |   |   | +        | +         | <b>31</b>  |            |
| Intestine Small, Ileum                  | + | A | + | + |   |   | A | + | + |   |   | + | + | + | + |   |   | + | + | + |   |   | +        |           | <b>27</b>  |            |
| Intestine Small, Jejunum<br>Dilatation  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b> | <b>1</b>  | <b>4.0</b> |            |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | +         | <b>48</b>  |            |
| Angiectasis                             |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>4</b>   | <b>1.8</b> |
| Basophilic Focus                        |   |   |   |   |   |   | X | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |          |           | <b>6</b>   |            |
| Cholangiofibrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   | <b>4.0</b> |
| Clear Cell Focus                        |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   |   | X | X |   |   |   |          |           | <b>11</b>  |            |
| Congestion                              |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   | <b>4.0</b> |
| Cyst                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   |            |
| Degeneration, Cystic                    | 1 |   |   |   | 2 | 2 |   |   |   |   | 1 |   |   | 1 | 2 | 1 |   |   |   |   |   | 1 | 1        | <b>19</b> | <b>1.4</b> |            |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   |            |
| Fatty Change                            |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 3 |   |   |   |   |   |   |          |           | <b>5</b>   | <b>2.2</b> |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |          |           | <b>2</b>   | <b>1.5</b> |
| Hepatodiaphragmatic Nodule              |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>4</b>   |            |
| Infiltration Cellular, Mononuclear Cell |   |   | 1 | 1 | 2 | 2 |   | 2 | 1 | 1 | 1 |   |   | 2 | 1 | 2 |   |   | 2 | 1 | 2 | 1 | 2        |           | <b>37</b>  | <b>1.4</b> |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   |            |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |          |           | <b>3</b>   | <b>2.7</b> |
| Vacuolization Cytoplasmic               |   |   | 2 |   |   |   | 3 |   | 1 | 2 |   |   |   |   |   |   |   |   |   | 2 |   |   |          |           | <b>11</b>  | <b>2.1</b> |
| Bile Duct, Hyperplasia                  | 1 |   | 1 |   | 3 |   |   |   |   |   | 1 |   |   | 1 |   |   |   |   | 2 |   | 2 | 1 | 2        |           | <b>17</b>  | <b>1.8</b> |
| Biliary Tract, Fibrosis                 |   |   | 1 | 1 | 1 | 1 |   | 1 | 1 |   |   |   |   | 2 |   |   |   |   |   |   | 1 |   | 1        |           | <b>19</b>  | <b>1.4</b> |
| Capsule, Fibrosis                       |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |           | <b>1</b>   | <b>1.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |   |       |   |       |       |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|---|-------|---|-------|-------|-----|
|   | 0560        | 0339  | 0580  | 0550  | 0728  | 0776  | 0644  | 0557  | 0773  | 0725  | 0448  | 0655  | 0660  | 0772  | 0618  | 0252  | 0572  | 0728  | 0728  | 0533  |          | 0757  |       |       |       |       |   |       |   |       |       |     |
| ANIMAL ID   | 04672       | 04681 | 04682 | 04691 | 04692 | 04661 | 04666 | 04667 | 04668 | 04669 | 04677 | 04678 | 04688 | 04689 | 04600 | 04601 | 04611 | 04612 | 04688 | 04689 | 04688    | 04688 | 04688 | 04688 | 04688 | 04688 |   |       |   |       |       |     |
| Hepatocyte, Necrosis                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 | 1 4.0 |   |       |       |     |
| Mesentery   |             |       |       | +     |       |       |       | +     |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       | 4 | 1 4.0 |       |     |
| Fat, Fibrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   | 4     | 1 4.0 |     |
| Fat, Inflammation, Granulomatous                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   | 4     | 1 4.0 |     |
| Fat, Necrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   | 4     | 4 4.0 |     |
| Oral Mucosa   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   | 1     |       |     |
| Pancreas  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 48    |     |
| Basophilic Focus                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 2     |     |
| Infiltration Cellular, Lymphocyte                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 43    | 1.6 |
| Lipomatosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 12    | 3.6 |
| Pigmentation  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 26    | 1.2 |
| Acinus, Degeneration                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 43    | 2.3 |
| Stomach, Forestomach                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 33    |     |
| Cyst Epithelial Inclusion                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 1     |     |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 3     | 3.0 |
| Stomach, Glandular                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 33    |     |
| Cyst Epithelial Inclusion                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 1     |     |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 3     | 3.3 |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |   |       |   |       | 1     | 4.0 |

**CARDIOVASCULAR SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|-----|
| Blood Vessel         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |   |     |
| Mineralization       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 2 | 3.5 |
| Media, Proliferation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 1 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0560        | 0339  | 0580  | 0581  | 0728  | 0776  | 0777  | 0779  | 0847  | 0853  | 0873  | 0875  | 0877  | 0879  | 0900  | 0904  | 0906  | 0907  | 0908  | 0909  |          |
| ANIMAL ID   | 04672       | 04681 | 04682 | 04691 | 04692 | 04697 | 04698 | 04699 | 04701 | 04702 | 04703 | 04704 | 04705 | 04706 | 04707 | 04708 | 04709 | 04710 | 04711 | 04712 |          |

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |    |     |
| Cardiomyopathy | 2 |   | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 2 | 3 |   | 1 | 2 | 1 | 3 | 4 | 1 | 1 | 2 | 1 | 1 | 2  | 43 | 2.1 |
| Mineralization |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  | 3.5 |
| Thrombosis     |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |     |

**ENDOCRINE SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Accessory Adrenal Cortical Nodule |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | 2  |     |
| Angiectasis                       |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4  | 2.5 |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 2  | 3.5 |
| Hyperplasia                       |   |   |   |   | 2 | 2 | 1 |   |   | 3 |   |   |   |   |   |   |   |   |   | 1 |   |   | 8  | 1.5 |
| Hypertrophy                       |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Vacuolization Cytoplasmic         |   |   | 2 |   | 2 | 2 | 2 | 1 | 1 | 3 |   |   | 2 |   | 1 | 1 |   |   | 2 | 2 |   | 2 | 22 | 1.7 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 47 |     |
| Hyperplasia                       |   |   |   |   |   |   | 1 |   | 1 |   | 1 |   |   |   |   |   | 4 |   |   | 3 |   |   | 7  | 1.9 |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 47 |     |
| Hyperplasia                       | 2 |   |   | 2 |   | 2 | 3 | 2 | 3 | 3 | 2 | 2 |   |   |   | 4 |   |   | 2 | 1 |   | 3 | 23 | 2.5 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Angiectasis                       | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   | 4 |   |   | 10 | 4.0 |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Pars Distalis, Cyst               |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 5  |     |
| Pars Distalis, Hyperplasia        |   |   |   | 2 | 2 | 4 |   | 1 |   |   |   | 4 |   |   | 3 |   | 2 |   |   | 2 |   | 3 | 19 | 2.3 |
| Pars Distalis, Hypertrophy        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 3  | 1.3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |        |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|--------|
|   | 0560        | 0339  | 0580  | 0581  | 0728  | 0776  | 0777  | 0847  | 0853  | 0857  | 0873  | 0875  | 0877  | 0884  | 0885  | 0886  | 0887  | 0888  | 0889  | 0890  |          | 0891   |
| ANIMAL ID   | 04672       | 04681 | 04682 | 04689 | 04691 | 04692 | 04697 | 04698 | 04699 | 04701 | 04702 | 04706 | 04707 | 04708 | 04709 | 04711 | 04712 | 04713 | 04714 | 04715 | 04716    |        |
| Thyroid Gland                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 47     |
| Ultimobranchial Cyst                                |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     | X     |       | X        | 6      |
| C-cell, Hyperplasia                                 |             |       |       |       | 4     | 1     |       |       |       |       | 2     |       | 3     |       |       |       | 1     | 2     | 1     |       | 1        | 15 1.7 |
| Follicular Cell, Hyperplasia                        | 3           |       | 3     |       |       | 2     |       |       |       | 3     |       |       | 2     |       | 3     | 2     |       |       |       |       |          | 9 2.8  |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Coagulating Gland<br>Lumen, Dilatation | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47     | 1 3.0  |
| Ductus Deferens<br>Granuloma Sperm     |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      | 1 4.0  |
| Epididymis                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48     | 10 1.9 |
| Exfoliated Germ Cell                   |   |   |   |   |   |   | 2 |   | 2 |   | 2 | 2 |   | 2 |   |   | 2 |   |   |   |   | 1 4.0  |        |
| Hypoplasia                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 9 3.8  |        |
| Hypospermia                            |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13 1.2 |        |
| Infiltration Cellular, Lymphocyte      |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   | 1 |   | 1 |   |   |   |   |   | 1 2.0  |        |
| Polyarteritis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      | 1      |
| Spermatocele                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
| Preputial Gland                        |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   | + | + | + |   |   | + | 15     | 3 3.0  |
| Atrophy                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 1 4.0  |        |
| Fibrosis                               |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3.8  |        |
| Hyperkeratosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 10 3.2 |        |
| Inflammation, Suppurative              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 3 |   |   |   |        |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0560        | 0339  | 0538  | 0551  | 0722  | 0776  | 0644  | 0557  | 0773  | 0572  | 0448  | 0655  | 0660  | 0772  | 0661  | 0288  | 0562  | 0778  | 0273  | 0572  |          |
| ANIMAL ID   | 04672       | 04681 | 04688 | 04699 | 04692 | 06667 | 06677 | 06677 | 06677 | 06677 | 06688 | 06688 | 06688 | 06688 | 08661 | 08661 | 08666 | 08666 | 08666 | 08666 |          |
| Duct, Dilatation                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 4     |       |       |       |       | 10 3.8   |
| Prostate, Dorsal/lateral Lobe                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 48       |
| Cyst, Mucinous                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |
| Fibrosis  | 3           |       |       |       | 2     | 2     | 3     |       |       |       | 1     |       |       | 2     | 2     | 1     | 1     |       |       |       | 12 2.0   |
| Infiltration Cellular, Lymphocyte                   | 3           |       | 1     | 1     | 1     |       | 2     |       |       | 1     | 1     |       |       | 1     | 1     | 2     | 1     |       | 1     |       | 27 1.3   |
| Inflammation, Suppurative                           | 3           | 2     | 2     | 2     | 2     | 3     | 3     | 2     | 2     | 1     | 1     | 2     | 2     | 3     | 1     | 3     | 2     | 2     | 2     | 3     | 47 2.0   |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 1 2.0    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Prostate, Ventral Lobe                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 48       |
| Atrophy   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 2.0    |
| Fibrosis  |             |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       | 2     |       |       | 6 1.7    |
| Infiltration Cellular, Lymphocyte                   |             |       | 1     |       |       |       |       | 1     |       |       |       |       |       | 1     |       |       |       | 1     | 1     |       | 15 1.1   |
| Inflammation, Suppurative                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5 1.4    |
| Epithelium, Hyperplasia                             |             |       |       |       |       | 3     |       |       | 2     |       |       |       |       | 2     | 3     | 1     |       |       |       |       | 10 2.2   |
| Seminal Vesicle                                     | +           | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 45       |
| Atrophy   |             |       | 2     |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       | 3 2.7    |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       | 2     | 2     |       |       |       |       |       |       |       |       |       | 5 2.4    |
| Lumen, Dilatation                                   |             | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4 3.0    |
| Testes  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 48       |
| Edema   |             |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Polyarteritis                                       |             |       | 1     |       | 1     | 2     | 2     |       | 2     | 2     |       |       |       |       |       |       |       |       |       | 2     | 16 2.4   |
| Seminiferous Tubule, Degeneration                   |             |       |       |       | 4     | 4     | 2     |       | 2     | 2     | 2     | 1     | 1     | 1     | 2     | 2     | 1     | 2     |       | 3     | 33 2.3   |

HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|   | 0560        | 0339  | 0580  | 0551  | 0728  | 0776  | 0647  | 0457  | 0077  | 0053  | 0075  | 0072  | 0048  | 0065  | 0066  | 0077  | 0061  | 0028  | 0057  | 0072  |          | 0053  |
| ANIMAL ID   | 04672       | 04681 | 04688 | 04699 | 04677 | 04667 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666 | 04666    | 04666 |
| Bone Marrow   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |
| Hypocellularity                                     |             |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |
| Myeloid Cell, Hyperplasia                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Lymph Node  |             | +     |       | +     |       |       |       |       |       |       |       |       |       | +     | +     |       |       |       | +     |       | +        |       |
| Cervical, Hyperplasia, Lymphoid                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Cervical, Infiltration Cellular, Plasma Cell        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Lumbar, Degeneration, Cystic                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       | 4        |       |
| Lumbar, Hyperplasia, Lymphoid                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |          |       |
| Lumbar, Infiltration Cellular, Plasma Cell          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       | 4     |       |       | 3        |       |
| Pancreatic, Hyperplasia, Lymphoid                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Pancreatic, Infiltration Cellular, Histiocyte       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Renal, Degeneration, Cystic                         |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |       |
| Renal, Hemorrhage                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Renal, Hyperplasia, Lymphoid                        |             |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Renal, Infiltration Cellular, Plasma Cell           |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |       |
| Lymph Node, Mandibular                              |             |       |       |       |       |       | +     |       |       |       |       |       | +     |       |       |       |       |       |       |       | +        |       |
| Degeneration, Cystic                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |       |
| Hyperplasia, Lymphoid                               |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |       |
| Infiltration Cellular, Plasma Cell                  |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |       |
| Lymph Node, Mesenteric                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | +     |       |       |       |          |       |
| Degeneration, Cystic                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |          |       |
| Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |          |       |
| Spleen  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |
| Hematopoietic Cell Proliferation                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Pigmentation  | 2           |       | 1     |       | 2     | 2     |       | 2     | 3     | 3     |       |       |       | 2     |       | 2     | 1     |       |       | 2     | 2        | 4     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |
| ANIMAL ID   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |   |
|   | 4           | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8        |   |
|   | 6           | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6 | 6        |   |
|   | 7           | 8 | 8 | 9 | 9 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 4        |   |
|   | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2        |   |

|            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Thymus     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | 46  |
| Atrophy    | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 44  |
| Hemorrhage |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
|            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3.0 |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Galactoceles                       |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 1  |
| Hyperplasia, Lobular               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Alveolus, Degeneration             | 4 |   |   |   | 2 | 4 | 3 | 3 | 2 |   | 2 | 4 |   | 4 |   | 4 |   | 2 |   |   | 2 | 4 | 25 |
| Alveolus, Dilatation               |   |   |   |   |   |   |   |   | 2 | 3 |   |   |   |   |   |   | 4 |   |   | 3 |   |   | 11 |
| Duct, Dilatation                   |   |   | 2 |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   | 4 |   |   | 3 |   |   | 15 |
| Skin                               |   |   | + | + | + |   |   | + | + |   |   |   |   | + | + |   |   |   | + | + |   |   | 14 |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   | 3  |
| Epithelium, Foot, Hyperplasia      |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 5  |
| Foot, Edema                        |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Foot, Fibrosis                     |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 4  |
| Foot, Inflammation, Chronic Active |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 5  |
| Foot, Necrosis                     |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 4  |
| Foot, Ulcer                        |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 4  |

MUSCULOSKELETAL SYSTEM

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Joint, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Joint, Hyperostosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Joint, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Bone, Femur                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                    |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               | 0 | 0 |
|------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|
| DAY ON TEST                        |  | 5 | 3 | 5 | 5 | 7 | 7 | 6 | 4 | 5 | 7 | 7 | 5 | 4 | 6 | 6 | 7 | 6 | 2 | 5 | 7 | 7 | 5 | 7               | 7 |   |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE |  | 6 | 3 | 8 | 1 | 2 | 2 | 7 | 7 | 7 | 2 | 2 | 4 | 8 | 5 | 5 | 2 | 1 | 8 | 6 | 2 | 8 | 2 | 3               | 2 |   |
| F1 25.0 BPA M                      |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               | 0 |   |
| ANIMAL ID                          |  | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8               | 8 |   |
|                                    |  | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6 | 3 | 3 | 4 | 4               | 4 |   |
|                                    |  | 7 | 8 | 8 | 9 | 9 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 4 | 4               | 4 |   |
|                                    |  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2               | 2 |   |
|                                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |   |   |

Fibrous Osteodystrophy 1 4.0

Skeletal Muscle + + + 3

**NERVOUS SYSTEM**

Brain, Brain Stem  
Compression + 48  
2 2 3 3 3 12 2.5

Brain, Cerebellum  
Gliosis + 48  
Hemorrhage 3 1 2.0  
Necrosis 1 3.0  
Polyarteritis 1 2.0  
1 1.0

Brain, Cerebrum  
Gliosis + 48  
Necrosis 1 2.0  
Polyarteritis 1 1.0  
Ventricle, Dilatation 1 3 1 1 8 1.3

Nerve Trigeminal  
Axon, Degeneration + + + + 5  
1 2 1.0

Peripheral Nerve, Sciatic + + + + 5

Peripheral Nerve, Tibial + + + + 5

Spinal Cord, Cervical + + + + 5

Spinal Cord, Lumbar + + + + 5

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|   | 0560        | 0339  | 0580  | 0510  | 0728  | 0726  | 0649  | 0457  | 0573  | 0075  | 0077  | 0542  | 0485  | 0669  | 0660  | 0727  | 0618  | 0252  | 0728  | 0573  |          | 0733  | 0572  |       |
| ANIMAL ID   | 04672       | 04681 | 04682 | 04661 | 04662 | 04667 | 04668 | 04669 | 04666 | 04667 | 04668 | 04669 | 04666 | 04667 | 04668 | 04669 | 04666 | 04667 | 04668 | 04669 | 04666    | 04667 | 04668 | 04669 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     | 0     |
|   | 4           | 4     | 4     | 4     | 4     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 8     | 8     | 8     | 8     | 8     | 8        | 8     | 8     | 8     |
|   | 6           | 6     | 6     | 6     | 6     | 7     | 7     | 7     | 7     | 7     | 8     | 8     | 8     | 8     | 8     | 6     | 6     | 6     | 6     | 6     | 6        | 6     | 6     | 6     |
|   | 7           | 8     | 8     | 9     | 9     | 7     | 7     | 7     | 8     | 8     | 9     | 9     | 0     | 0     | 1     | 1     | 1     | 2     | 3     | 3     | 4        | 4     | 4     | 4     |
|   | 2           | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2        | 1     | 2     | 1     |

|                       |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Axon, Degeneration    | 1 | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spinal Cord, Thoracic | + | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                       |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

RESPIRATORY SYSTEM

|   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
|---|---|---|---|---|--|--|---|---|--|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|
| Lung  | + | + | + | + |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foreign Body  |   |   |   |   |  |  |   |   |  |   | X |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Infiltration Cellular, Histiocyte                     |   |   |   | 4 |  |  |   | 3 |  | 2 |   | 3 |   |   | 1 |   | 4 | 1 | 2 |  |  |  |  |  |
| Inflammation, Granulomatous                           |   |   |   |   |  |  |   |   |  |   | 3 |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Alveolar Epithelium, Hyperplasia                      |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   | 3 |   |   |   |  |  |  |  |  |
| Nose  | + | + | + | + |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Fibrous Osteodystrophy                                |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 |   |   |   |  |  | 4 |   |  |   |   |   |   | 4 |   |   | 2 |   |   |  |  |  |  |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |  |  | 2 |   |  |   |   |   | 2 |   |   |   |   |   |   |  |  |  |  |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Trachea   | + | A | + | + |  |  |   |   |  |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |

SPECIAL SENSES SYSTEM

|                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Zymbal's Gland   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

URINARY SYSTEM

|        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |        |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|--------|
|   | 0560        | 0339  | 0580  | 0551  | 0728  | 0776  | 0647  | 0457  | 0077  | 0077  | 0542  | 0485  | 0660  | 0667  | 0721  | 0668  | 0252  | 0572  | 0728  | 0533  |          | 0757  |        |
| ANIMAL ID   | 04672       | 04681 | 04682 | 04689 | 04691 | 04692 | 04697 | 04698 | 04699 | 04701 | 04702 | 04706 | 04707 | 04708 | 04709 | 04710 | 04711 | 04712 | 04713 | 04714 | 04715    |       |        |
| Accumulation, Hyaline Droplet                       |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       | 1        | 1 4.0 |        |
| Casts Protein                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          | 1     | 1 1.0  |
| Infarct   |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     | 1      |
| Infiltration Cellular, Polymorphonuclear            |             |       |       |       | 1     | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 5     | 1.8    |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       | 2     |       |       |       |          | 3     | 3.0    |
| Nephropathy   | 3           |       | 2     | 2     | 4     | 4     | 4     | 3     | 4     | 2     | 4     | 1     |       | 2     | 1     | 1     | 4     |       | 4     | 3     | 1        | 4     | 43 2.8 |
| Polyarteritis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     | 3.0    |
| Thrombosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |          | 1     | 1      |
| Cortex, Cyst  |             |       |       | X     |       |       |       |       | X     |       |       |       |       |       |       |       |       | X     |       | X     | X        | 13    | 13     |
| Pelvis, Dilatation                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     | 1 4.0  |
| Renal Tubule, Cyst                                  |             |       |       | X     | X     | X     |       |       | X     |       | X     | X     | X     |       |       |       |       |       |       | X     |          | 15    | 15     |
| Renal Tubule, Hyperplasia, Atypical                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     | 3.0    |
| Transitional Epithelium, Hyperplasia                |             |       |       |       | 2     | 3     | 1     |       |       |       | 1     |       |       |       |       | 2     |       | 2     |       |       | 2        | 12    | 1.7    |
| Urinary Bladder                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3     | 3      |
| Lumen, Dilatation                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     | 3.7    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                       |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|-----------------------|------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>6<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>5<br>2<br>9 | 0<br>7<br>2<br>8 | 0<br>5<br>9<br>7 | 0<br>6<br>9<br>8 | 0<br>5<br>7<br>4 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>6<br>3<br>0 |           |                    | 0<br>6<br>2<br>3      | 0<br>7<br>2<br>8 |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0<br>0<br>4<br>9<br>1 |                  |

Oval Cell, Hyperplasia

Mesentery

Fat, Necrosis

+

4

Pancreas

Basophilic Focus

Infiltration Cellular, Lymphocyte

Inflammation, Chronic Active

Lipomatosis

Pigmentation

Acinus, Degeneration

Artery, Mineralization

Duct, Dilatation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |
|   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1 | 2 | 1 | 1 | 3 | 2 |   | 2 | 2 | 1 | 3 | 2 | 1 | 2 | 3 | 2 | 3 |   | 2 | 1 |   | 2 |   | 1 | 2 |
|   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 2 |   |   |   |   |   |   |   | 3 |
| 1 |   | 1 |   | 1 | 1 |   |   |   |   | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 |   | 1 |   | 1 |   | 1 |   |
| 2 | 2 | 2 | 2 | 4 | 2 | 1 | 2 | 3 | 2 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 2 | 2 | 1 |   | 3 |   | 1 | 2 |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Stomach, Forestomach

Cyst Epithelial Inclusion

|   |   |   |   |   |   |   |   |  |   |  |  |   |   |   |   |   |   |  |  |  |  |   |   |
|---|---|---|---|---|---|---|---|--|---|--|--|---|---|---|---|---|---|--|--|--|--|---|---|
| + | + | + | + | + | + | + | + |  | + |  |  | + | + | + | + | + | + |  |  |  |  | + | + |
|---|---|---|---|---|---|---|---|--|---|--|--|---|---|---|---|---|---|--|--|--|--|---|---|

Stomach, Glandular

Mineralization

Epithelium, Hyperplasia

|   |   |   |   |   |   |   |   |  |   |  |  |   |   |   |   |   |   |  |  |  |  |   |   |
|---|---|---|---|---|---|---|---|--|---|--|--|---|---|---|---|---|---|--|--|--|--|---|---|
| + | + | A | + | + | + | + | + |  | + |  |  | + | + | + | + | + | + |  |  |  |  | A | + |
|   |   |   |   |   |   |   |   |  |   |  |  |   |   | 3 |   |   |   |  |  |  |  |   |   |
|   |   |   |   |   |   |   |   |  |   |  |  |   |   | 3 |   |   |   |  |  |  |  |   |   |

CARDIOVASCULAR SYSTEM

Blood Vessel

Dilatation

Mineralization

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |

Heart

Cardiomyopathy

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|   |   | 3 |   | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 4 | 1 | 2 | 3 | 2 | 2 | 4 | 2 | 1 | 1 | 3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>6<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>8<br>8 | 0<br>5<br>2<br>5 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>9<br>5 | 0<br>6<br>9<br>7 | 0<br>6<br>9<br>4 | 0<br>5<br>0<br>1 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 |           |                    | 0<br>6<br>3<br>0 | 0<br>6<br>2<br>3 | 0<br>7<br>2<br>8 |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 00491            |                  |

Mineralization Ventricle, Dilatation 4 4

ENDOCRINE SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Adrenal Cortex                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   |
| Angiectasis                      |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Degeneration, Cystic             |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |     |
| Hyperplasia                      |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   | 2 |   |   |   |   |   |   |     |
| Hypertrophy                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |     |
| Metaplasia, Osseous              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |     |
| Vacuolization Cytoplasmic        |   |   |   |   |   | 2 |   |   | 2 | 1 |   |   |   | 2 |   | 2 | 2 |   |   |   | 2 |   | 2 2 |
| Adrenal Medulla                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   |
| Hyperplasia                      |   |   |   | 1 |   |   |   |   |   | 1 | 2 |   |   |   | 4 |   |   |   |   | 1 |   |   |     |
| Islets, Pancreatic               | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | A | +   |
| Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Parathyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   |
| Hyperplasia                      |   |   |   |   | 2 | 4 |   |   |   | 2 | 2 |   |   |   | 2 | 4 | 1 | 4 | 3 |   |   | 2 |     |
| Pituitary Gland                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   | 3 | 4 |     |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4   |
| Pars Distalis, Cyst              |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   | X |   |   | X X |
| Pars Distalis, Cyst Multilocular |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
| Pars Distalis, Hyperplasia       |   |   |   |   |   |   |   | 2 | 4 |   |   | 1 |   | 3 | 4 |   | 2 |   |   | 1 |   |   | 1   |
| Pars Distalis, Hypertrophy       |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                       |                    |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|-----------------------|--------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>5<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>9<br>5 | 0<br>6<br>9<br>7 | 0<br>6<br>9<br>8 | 0<br>5<br>7<br>4 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 |           |                    | 0<br>6<br>3<br>0 | 0<br>6<br>2<br>3      | 0<br>7<br>2<br>3   |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 0<br>0<br>4<br>9<br>1 | males<br>(cont...) |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thyroid Gland                | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          |   |   |   |   | 1 |   |   |   |   |   | 1 | 2 | 1 |   |   | 1 |   |   | 1 |   | 2 |   |   |
| Follicular Cell, Hyperplasia |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Exfoliated Germ Cell              |   |   |   |   |   | 1 |   |   |   | 2 |   |   |   |   | 4 |   | 2 | 1 |   |   |   |   | 1 | 2 |
| Granuloma Sperm                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Hypospermia                       |   |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   | 4 |   |   | 4 |   |   |   |   |
| Infiltration Cellular, Lymphocyte | 1 |   |   |   | 1 |   |   |   | 1 |   |   | 1 | 1 |   |   | 1 |   |   | 1 |   |   |   | 1 | 1 |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat Pad, Epididymal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Preputial Gland                   |   |   |   |   | + |   | + |   |   |   |   | + | + | + |   |   | + |   |   |   |   | + | + |   |
| Atrophy                           |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
|   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
| Inflammation, Suppurative Duct, Dilatation          |             |   |   |   |   |   | 2 |   |   |   |   | 4 | 4 | 2 |   |   |   | 3 |   |   |   |   | 3 | 4 |   |   |   |   |   |   |   |   |  |
|   |             |   |   |   |   |   | 2 |   |   |   |   | 4 | 4 | 2 |   |   |   | 3 |   |   |   |   | 3 | 4 |   |   |   |   |   |   |   |   |  |
| Prostate, Dorsal/lateral Lobe Cyst, Mucinous        |             | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | X |   | + | + | + | + | + | + |   |   |  |
| Fibrosis  |             |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte                   |             |   | 2 |   |   | 1 | 1 | 1 |   | 2 |   |   | 1 | 1 |   | 1 | 1 |   |   |   |   |   |   |   | 2 |   | 1 | 1 |   |   |   |   |  |
| Inflammation, Suppurative                           |             | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |   |   |   |   |   |   |   | 1 | 2 | 3 | 1 | 2 | 2 |   |   |   |  |
| Inflammation, Chronic Active                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Muscularis, Necrosis                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Muscularis, Regeneration                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Prostate, Ventral Lobe                              |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |   |  |
| Fibrosis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 4 |   | 1 |   |   |   |   |   |  |
| Hemorrhage  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte                   |             | 1 | 1 | 1 |   | 1 |   | 1 |   |   |   | 1 |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative                           |             |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mineralization                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Necrosis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epithelium, Hyperplasia                             |             |   | 2 |   | 3 |   | 2 | 2 |   |   |   | 2 |   | 1 | 2 |   |   | 3 | 2 | 2 | 2 |   |   |   |   | 2 |   |   |   |   |   |   |  |
| Seminal Vesicle                                     |             | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |  |
| Atrophy   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Edema   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Necrosis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epithelium, Hyperplasia                             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lumen, Dilatation                                   |             |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

males  
(cont...)

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                       |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|-----------------------|------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>6<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>5<br>8<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>9<br>5 | 0<br>6<br>9<br>7 | 0<br>6<br>9<br>8 | 0<br>5<br>7<br>4 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 |           |                    | 0<br>6<br>3<br>0 | 0<br>6<br>2<br>3      | 0<br>6<br>2<br>8 |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 0<br>0<br>4<br>9<br>1 |                  |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Polyarteritis                     |   |   |   |   |   | 3 |   |   |   |   |   |   | 2 |   | 3 | 2 | 4 |   |   | 3 | 1 |   | 3 |   |
| Seminiferous Tubule, Degeneration |   | 1 |   | 2 | 1 | 1 | 1 | 1 | 4 | 3 | 4 |   | 4 |   | 3 | 4 | 3 | 1 | 1 | 4 | 2 | 1 | 2 | 3 |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |
| Myeloid Cell, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 3 |   |   |   |   | 3 |   |
| Lymph Node                                    |   | + |   |   |   | + |   |   |   |   |   |   | + |   | + |   |   |   |   |   | + |   |   | + |
| Inguinal, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Renal, Degeneration, Cystic                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Renal, Hemorrhage                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Renal, Hyperplasia, Lymphoid                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Renal, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Lymph Node, Mandibular                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Congestion                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Degeneration, Cystic                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Hyperplasia, Lymphoid                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Infiltration Cellular, Lymphocyte             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Infiltration Cellular, Plasma Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...)    |                    |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|-----------------------|--------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>6<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>8 | 0<br>5<br>2<br>5 | 0<br>6<br>9<br>7 | 0<br>6<br>9<br>8 | 0<br>5<br>7<br>4 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>6<br>3<br>0 |           |                       | 0<br>6<br>2<br>3   |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0<br>0<br>4<br>9<br>1 | males<br>(cont...) |

Lymph Node, Mesenteric

Spleen  
 Hematopoietic Cell Proliferation  
 Hyperplasia, Lymphoid  
 Necrosis  
 Pigmentation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + |
|   |   |   |   | 2 | 1 |   |   |   |   |   | 2 |   |   | 4 |   | 2 |   |   | 1 |   |   | 1 |   |
|   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| 2 |   | 1 |   |   |   | 3 |   |   | 1 |   | 1 | 3 | 2 | 4 |   | 1 |   | 1 |   |   | 2 |   | 2 |

Thymus  
 Atrophy

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 2 | 4 |   | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

**INTEGUMENTARY SYSTEM**

Mammary Gland  
 Fibrosis  
 Galactocele  
 Alveolus, Degeneration  
 Alveolus, Dilatation  
 Duct, Dilatation  
 Skin  
 Angiectasis  
 Cyst Epithelial Inclusion  
 Fibrosis  
 Inflammation, Granulomatous  
 Inflammation, Chronic Active  
 Necrosis  
 Ulcer  
 Epithelium, Hyperplasia  
 Epithelium, Foot, Hyperplasia

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   | 4 | 3 | 3 |   | 3 |   | 4 | 3 |   |   | 4 | 4 | 4 | 4 |   | 4 | X |
|   |   | 3 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2 | 2 |   | 2 |
|   |   |   |   |   | 3 |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 | 2 |   |   | 3 |
|   | + |   | + |   | + | + | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   | X |   | X | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                       |                  |                       |  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|-----------------------|------------------|-----------------------|--|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>1<br>3 | 0<br>4<br>6<br>8 | 0<br>5<br>7<br>5 | 0<br>6<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>6<br>7<br>4 | 0<br>6<br>8<br>7 | 0<br>6<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>5<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>9<br>5 | 0<br>6<br>9<br>7 | 0<br>6<br>9<br>8 | 0<br>5<br>7<br>4 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>7 |           |                    | 0<br>6<br>2<br>8 | 0<br>6<br>3<br>0      | 0<br>6<br>2<br>3 | 0<br>7<br>2<br>8      |  |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0         | 0                  | 0                | 0<br>0<br>4<br>9<br>1 |                  |                       |  |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 2                | 2                | 2                | 2                | 2                | 2                | 2                | 2                | 2                | 2                | 2         | 4                  | 4                | 4                     | 4                | 4<br>4<br>5<br>0<br>2 |  |
|   | 4                | 4                | 5                | 5                | 5                | 5                | 5                | 5                | 5                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 8         | 8                  | 8                | 8                     | 1<br>2           |                       |  |
|   | 9                | 9                | 0                | 0                | 1                | 1                | 2                | 2                | 3                | 3                | 5                | 5                | 6                | 6                | 7                | 7                | 8                | 8                | 9                | 9                | 1         | 1                  | 1                | 1                     | 1                |                       |  |
|   | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1         | 2                  | 1                | 2                     | 1                |                       |  |

Foot, Edema 4  
Foot, Fibrosis 4  
Foot, Inflammation, Chronic Active 4  
Foot, Necrosis 4  
Foot, Ulcer 4

MUSCULOSKELETAL SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Bone                   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Bone, Femur            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Skeletal Muscle        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Degeneration           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |

NERVOUS SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Compression       |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   | 1 | 1 | 1 |
| Cyst              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Hemorrhage        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thrombosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |
| Brain, Cerebrum   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |
| Compression       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Gliosis           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |
|---|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 | 0 |   |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | ANIMAL ID | 3           | 7 | 4 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 7 | 7 |                    | 7 | 6 | 6 |
|   |           | 1           | 1 | 6 | 7 | 0 | 0 | 7 | 8 | 2 | 2 | 8 | 2 | 2 | 9 | 9 | 9 | 7 | 0 | 0 | 2 | 2                  | 3 | 2 | 2 |
|   |           | 2           | 3 | 8 | 5 | 2 | 0 | 4 | 7 | 6 | 7 | 9 | 8 | 8 | 5 | 7 | 8 | 4 | 1 | 6 | 7 | 7                  | 8 | 0 | 3 |
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 |
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4                  | 4 | 4 | 4 |
|   |           | 4           | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8                  | 8 | 8 | 8 |
|   |           | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1                  | 1 | 2 | 2 |
|   |           | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 3 |

Hemorrhage  
Necrosis  
Ventricle, Dilatation

Nerve Trigeminal  
Axon, Degeneration

+  
2

Peripheral Nerve, Sciatic

+  
+

Peripheral Nerve, Tibial

+  
+

Spinal Cord, Cervical  
Axon, Degeneration

+  
1

Spinal Cord, Lumbar  
Axon, Degeneration

+  
3

Spinal Cord, Thoracic  
Axon, Degeneration

+  
1

RESPIRATORY SYSTEM

Lung  
Congestion  
Foreign Body  
Infiltration Cellular, Histiocyte  
Inflammation, Granulomatous  
Inflammation, Chronic Active  
Alveolar Epithelium, Hyperplasia

+ + A + + + + + + + + + + + + + + + +  
X  
4 1 1 1 1 3 2  
3  
1 1  
1 3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked





**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M |  | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID |  | males<br>(cont...) |  |
|---|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--|--------------------|--|
|   |  | 3           | 7 | 4 | 5 | 6 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |           |  |                    |  |
|   |  | 1           | 1 | 6 | 7 | 0 | 0 | 7 | 8 | 2 | 2 | 8 | 2 | 2 | 9 | 9 | 9 | 7 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2         |  |                    |  |
|   |  | 2           | 3 | 8 | 5 | 2 | 0 | 4 | 7 | 6 | 7 | 9 | 8 | 8 | 5 | 7 | 8 | 4 | 1 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8         |  |                    |  |
|   |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |  |                    |  |
|   |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4         |  |                    |  |
|   |  | 4           | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8         |  |                    |  |
|   |  | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2         |  |                    |  |
|   |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         |  |                    |  |
| Polyarteritis                                       |  |             |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Artery, Intima, Proliferation                       |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Cortex, Cyst  |  |             |   |   |   |   |   |   | X |   | X |   |   | X |   |   |   | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Pelvis, Dilatation                                  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Renal Tubule, Cyst                                  |  |             |   |   | X |   |   |   |   |   | X | X |   | X | X |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Renal Tubule, Hyperplasia, Atypical                 |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Transitional Epithelium, Hyperplasia                |  |             |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Urinary Bladder                                     |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Fibrosis  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Hemorrhage  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Inflammation, Chronic Active                        |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Necrosis  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |
| Lumen, Dilatation                                   |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |                    |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
|   | 0461        | 0463  | 0465  | 0464  | 0465  | 0464  | 0466  | 0463  | 0466  | 0467  | 0467  | 0465  | 0462  | 0464  | 0467  | 0463  | 0467  | 0467  | 0466  | 0467  |          | 0467  | 0466  | 0467  | 0467  | 0466  |
| ANIMAL ID   | 04832       | 04884 | 04888 | 04888 | 04888 | 04889 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899 | 04899    | 04899 | 04899 | 04899 | 04899 | 04899 |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Esophagus  | + | + | + | + | + | + | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + | <b>36</b>     |
| Perforation                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Periesophageal Tissue, Foreign Body              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Periesophageal Tissue, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Periesophageal Tissue, Necrosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Intestine Large, Colon                           | A | + | + | + | + | + | + | + | + |   | + | + | + | A | + | + | + |   | + | + | + | A | A | A | A |   |   |   |   | <b>30</b>     |
| Intestine Small, Ileum                           | A | + | + | A | + | + | A | + | + |   | + | + | + | A | + | + | + |   | + | + | + | A | A | A | A |   |   |   |   | <b>24</b>     |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b>     |
| Angiectasis                                      |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4 1.8</b>  |
| Basophilic Focus                                 |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | <b>8</b>      |
| Clear Cell Focus                                 |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X | X |   |   |   |   |   |   |   | X |   |   |   |   |   | <b>14</b>     |
| Cyst   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Deformity  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Degeneration, Cystic                             |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 2 |   |   |   | 1 | 1 | 1 |   |   | 2 |   |   |   | 2 |   | <b>22 1.5</b> |
| Fatty Change                                     |   | 4 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   | <b>5 2.4</b>  |
| Hepatodiaphragmatic Nodule                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>      |
| Infiltration Cellular, Mononuclear Cell          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | <b>36 1.3</b> |
| Inflammation, Chronic Active                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.0</b>  |
| Tension Lipidosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | <b>1 2.0</b>  |
| Vacuolization Cytoplasmic                        |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>15 1.7</b> |
| Bile Duct, Hyperplasia                           |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1 | <b>16 1.7</b> |
| Biliary Tract, Cyst                              |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Biliary Tract, Fibrosis                          |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 | <b>15 1.3</b> |
| Hepatocyte, Necrosis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|
|   | 04          | 03 | 05 | 04 | 05 | 04 | 06 | 03 | 06 | 07 | 07 | 05 | 02 | 04 | 07 | 03 | 07 | 07 | 06 | 07 |          | 07 | 06 | 06 |
| ANIMAL ID   | 08          | 08 | 08 | 08 | 08 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09       | 09 | 09 | 09 |
|   | 1           | 3  | 8  | 4  | 3  | 1  | 1  | 2  | 0  | 7  | 0  | 7  | 5  | 4  | 8  | 2  | 6  | 2  | 0  | 1  | 2        | 2  | 8  | 6  |
|   | 2           | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2        | 1  | 2  | 1  |

Oval Cell, Hyperplasia

1

1 1.0

Mesentery

1

Fat, Necrosis

1 4.0

Pancreas

Basophilic Focus

Infiltration Cellular, Lymphocyte

Inflammation, Chronic Active

Lipomatosis

Pigmentation

Acinus, Degeneration

Artery, Mineralization

Duct, Dilatation

Stomach, Forestomach

Cyst Epithelial Inclusion

Stomach, Glandular

Mineralization

Epithelium, Hyperplasia

CARDIOVASCULAR SYSTEM

Blood Vessel

Dilatation

Mineralization

Heart

Cardiomyopathy

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |       |   |  |  |
|---|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|-------|---|--|--|
|   |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 |       |   |  |  |
|   |  | 4           | 3 | 5 | 4 | 5 | 4 | 6 | 3 | 6 | 7 | 7 | 5 | 2 | 4 | 7 | 3 | 7 | 7 | 6 | 7 | 7        | 6 | 6     |   |  |  |
|   |  | 6           | 4 | 1 | 7 | 8 | 9 | 3 | 9 | 1 | 2 | 2 | 5 | 4 | 8 | 2 | 6 | 2 | 0 | 1 | 2 | 2        | 1 | 0     | 2 |  |  |
|   |  | 1           | 3 | 8 | 4 | 3 | 1 | 1 | 2 | 0 | 7 | 0 | 7 | 5 | 6 | 7 | 9 | 7 | 6 | 8 | 6 | 8        | 8 | 7     |   |  |  |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M |  | ANIMAL ID   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |       |   |  |  |
|   |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0     |   |  |  |
|   |  | 4           | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8        | 8 | 8     |   |  |  |
|   |  | 8           | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7        | 7 | 7     |   |  |  |
|   |  | 3           | 4 | 4 | 5 | 5 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 7 | 7 | 8 | 8        | 9 | 9     |   |  |  |
|   |  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 1 | 2     |   |  |  |
| Mineralization                                      |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3        | 2 | 3 3.0 |   |  |  |
| Ventricle, Dilatation                               |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   | 1 4.0 |   |  |  |

ENDOCRINE SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|---|---|--------|---|---|---|--|--|---|--|--|--|---|--|--|--|---|--|---|--|--|-------|--------|-------|--------|
| Adrenal Cortex                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 2.0 |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Degeneration, Cystic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 1.0 |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 7 1.7 |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Hypertrophy                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0 |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Metaplasia, Osseous              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 3.5 |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Vacuolization Cytoplasmic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2  | 3     | 1 | 3 | 14 2.0 |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Adrenal Medulla                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |    |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  | 6 1.7 |        |       |        |
| Islets, Pancreatic               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        | 1 3.0 |        |
| Parathyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 3 |   |        | 2 | 2 | 2 |  |  | 1 |  |  |  | 2 |  |  |  | 3 |  | 4 |  |  |       | 18 2.5 |       |        |
| Pituitary Gland                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       |        |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 4 |   |        | 4 |   |   |  |  |   |  |  |  | 3 |  |  |  | 4 |  |   |  |  |       | 8 3.8  |       |        |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   | 4      |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        | 2 4.0 |        |
| Pars Distalis, Cyst              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  | X |  |  |  |   |  |  |  |   |  |   |  |  |       |        | 6     |        |
| Pars Distalis, Cyst Multilocular |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  | X |  |  |  |   |  |  |  |   |  |   |  |  |       |        | 3     |        |
| Pars Distalis, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       | 15 2.2 |
| Pars Distalis, Hypertrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |   |   |        |   |   |   |  |  |   |  |  |  |   |  |  |  |   |  |   |  |  |       |        |       | 3 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |        |      |
|---|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|------|
|   | 0461        | 0343   | 0518   | 0474   | 0583   | 0491   | 0631   | 0362   | 0690   | 0772   | 0770   | 0545   | 0248   | 0773   | 0377   | 0776   | 0671   | 0772   | 0778   | 0774   |          | 0679   | 0662 |
| ANIMAL ID   | 048332      | 048841 | 048844 | 048845 | 048891 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899 | 048899   | 048899 |      |
| Thyroid Gland                                       | A           | +      | +      | A      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | A      | +    |
| Inflammation, Chronic Active                        |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 2      |        |        |        |        |          |        |      |
| Polyarteritis                                       |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |      |
| Ultimobranchial Cyst                                |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |      |
| C-cell, Hyperplasia                                 |             |        |        | 1      |        | 2      |        |        |        | 2      | 2      | 1      |        |        | 3      |        |        |        |        |        | 1        | 2      |      |
| Follicular Cell, Hyperplasia                        |             |        | 2      |        |        |        |        |        |        | 3      | 2      |        |        |        |        |        |        |        |        |        |          | 2      |      |
|   |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |      |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thyroid Gland                | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Polyarteritis                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          |   |   |   | 1 |   | 2 |   |   |   | 2 | 2 | 1 |   |   | 3 |   |   |   |   |   |   | 1 | 2 |
| Follicular Cell, Hyperplasia |   |   | 2 |   |   |   |   |   |   | 3 | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |
|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Exfoliated Germ Cell              | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 3 | 1 |   |   |   |   |   | 3 |
| Granuloma Sperm                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hypospermia                       | 4 | 4 |   |   |   | 4 |   |   |   | 4 | 4 |   |   |   | 4 |   |   | 4 | 4 |   |   | 4 |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 1 | 1 |   |   | 2 |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Fat Pad, Epididymal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Preputial Gland                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |        |        |       |        |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|--------|--------|-------|--------|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |   |   |        |        |       |        |
|   | 4           | 3 | 5 | 4 | 5 | 4 | 6 | 3 | 6 | 7 | 7 | 5 | 2 | 4 | 7 | 3 | 7 | 7 | 6 | 7 |          | 7 | 6 | 6 | 6      |        |       |        |
| ANIMAL ID   | 6           | 4 | 1 | 7 | 8 | 9 | 3 | 9 | 1 | 2 | 2 | 5 | 4 | 8 | 2 | 6 | 2 | 0 | 1 | 2 | 2        | 1 | 0 | 2 |        |        |       |        |
|   | 1           | 3 | 8 | 4 | 3 | 1 | 1 | 2 | 0 | 7 | 0 | 7 | 5 | 6 | 7 | 9 | 7 | 6 | 8 | 6 | 8        | 8 | 4 | 9 | 7      |        |       |        |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0      |        |       |        |
|   | 4           | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8        | 8 | 8 | 8 | 8      |        |       |        |
|   | 8           | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 | 7 | 7 | 7 | 7        | 7 | 7 | 7 | 7      |        |       |        |
|   | 3           | 4 | 4 | 4 | 5 | 5 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 7        | 8 | 8 | 9 | 9      |        |       |        |
|   | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1        | 2 | 1 | 2 | 2      |        |       |        |
| Inflammation, Suppurative Duct, Dilatation          |             |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 2 |   |   | 4        |   | 2 |   | 11 3.1 |        |       |        |
|   |             |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 | 3 |   |          | 4 | 3 |   | 12 3.3 |        |       |        |
| Prostate, Dorsal/lateral Lobe Cyst, Mucinous        | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | 50     | 3      |       |        |
| Fibrosis  |             |   |   |   |   | 2 |   | 4 | 2 |   |   |   |   |   |   |   | 4 |   |   | X |          | 4 |   |   | 9 2.8  |        |       |        |
| Infiltration Cellular, Lymphocyte                   |             |   |   |   | 2 |   | 2 | 4 |   |   | 1 |   | 1 | 1 |   | 2 | 1 |   |   |   | 3        |   | 3 | 1 | 1      | 27 1.7 |       |        |
| Inflammation, Suppurative                           |             |   |   |   | 2 | 2 | 2 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 1 | 1        | 2 | 2 | 3 | 2      | 1      | 1     | 45 1.8 |
| Inflammation, Chronic Active Muscularis, Necrosis   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 3.0  |       |        |
| Muscularis, Regeneration                            |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 4.0  |       |        |
| Prostate, Ventral Lobe                              | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | +      | 49     | 8 2.5 |        |
| Fibrosis  |             |   |   |   |   |   |   | 2 | 4 |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 2.0  |       |        |
| Hemorrhage  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 15 1.7 |       |        |
| Infiltration Cellular, Lymphocyte                   |             |   |   |   | 2 | 2 | 4 |   |   |   |   |   |   | 1 |   | 2 | 4 |   |   |   |          | 2 |   |   |        | 6 2.2  |       |        |
| Inflammation, Suppurative                           |             |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 2 | 4 |   |   |          |   |   |   |        | 1 4.0  |       |        |
| Inflammation, Chronic Active                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 1.0  |       |        |
| Mineralization                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 4.0  |       |        |
| Necrosis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        | 1 4.0  |       |        |
| Epithelium, Hyperplasia                             |             |   |   |   |   |   |   |   |   | 2 |   |   | 4 | 2 |   |   |   |   |   |   |          |   |   |   |        | 18 2.2 |       |        |
| Seminal Vesicle                                     | A           | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | +        | + | + | + | +      | 41     | 1 3.0 |        |
| Atrophy   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 1 3.0 |        |
| Edema   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 1 3.0 |        |
| Inflammation, Chronic Active                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 2 3.5 |        |
| Necrosis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 1 3.0 |        |
| Epithelium, Hyperplasia                             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 3 3.0 |        |
| Lumen, Dilatation                                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |        |        | 3     | 2 3.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|
|   | 04          | 03 | 05 | 04 | 05 | 04 | 06 | 03 | 06 | 07 | 07 | 05 | 02 | 04 | 07 | 03 | 07 | 07 | 06 | 07 |          | 07 | 06 | 07 | 07 | 06 | 06 |
| ANIMAL ID   | 04          | 04 | 04 | 04 | 04 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08 | 08       | 08 | 08 | 08 | 08 | 08 | 08 |
|   | 83          | 84 | 84 | 85 | 85 | 91 | 91 | 92 | 92 | 93 | 93 | 94 | 94 | 95 | 95 | 97 | 97 | 97 | 97 | 97 | 97       | 97 | 97 | 97 | 97 | 97 | 97 |
|   | 23          | 24 | 24 | 25 | 25 | 21 | 21 | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 27 | 27 | 27 | 27 | 27 | 27       | 27 | 27 | 27 | 27 | 27 | 27 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Polyarteritis                     |   |   |   | 1 | 2 | 2 |   | 4 | 3 |   | 2 |   | 2 |   | 2 |   | 4 |   | 4 | 3 |   | 2 |   |   |   |   | 20 2.6 |
| Seminiferous Tubule, Degeneration | 4 | 4 |   |   | 4 | 2 |   | 4 | 4 |   | 1 |   | 2 | 4 | 2 |   | 4 | 4 |   | 4 | 2 |   |   |   |   |   | 35 2.7 |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49    |
| Myeloid Cell, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 3.0 |
| Lymph Node                                    |   |   | + |   |   |   | + | + |   | + |   |   |   |   | + |   | + | + | + |   |   |   |   |   | + |   | 15    |
| Inguinal, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Inguinal, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   | 4 3.8 |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   | 4 3.8 |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   | 4 |   | 3 |   |   |   |   |   |   |   | 6 3.8 |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Renal, Degeneration, Cystic                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 4 |   |   |   |   |   |   | 4 |   | 6 3.7 |
| Renal, Hemorrhage                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 |   | 3 3.3 |
| Renal, Hyperplasia, Lymphoid                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.0 |
| Renal, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 3.0 |
| Lymph Node, Mandibular                        |   |   | + |   |   |   | + | + |   |   |   | + |   |   |   |   |   |   | + |   |   |   |   |   |   |   | 8     |
| Congestion                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Degeneration, Cystic                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 2 3.5 |
| Hyperplasia, Lymphoid                         |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 4 3.0 |
| Infiltration Cellular, Lymphocyte             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 1 3.0 |
| Infiltration Cellular, Plasma Cell            |   |   |   |   |   |   | 4 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3.5 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 0<br>4<br>6<br>1      | 0<br>3<br>4<br>3      | 0<br>5<br>1<br>8      | 0<br>4<br>7<br>4      | 0<br>5<br>8<br>3      | 0<br>4<br>9<br>1      | 0<br>6<br>3<br>1      | 0<br>3<br>9<br>2      | 0<br>6<br>1<br>0      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>0      | 0<br>5<br>4<br>5      | 0<br>2<br>4<br>6      | 0<br>4<br>8<br>7      | 0<br>7<br>2<br>9      | 0<br>3<br>6<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>8      | 0<br>7<br>2<br>6      | 0<br>7<br>2<br>8      |                       | 0<br>7<br>2<br>8      | 0<br>7<br>1<br>4      | 0<br>6<br>0<br>9      | 0<br>6<br>2<br>7      |
| ANIMAL ID   | 0<br>4<br>8<br>3<br>2 | 0<br>4<br>8<br>4<br>1 | 0<br>4<br>8<br>4<br>2 | 0<br>4<br>8<br>4<br>1 | 0<br>4<br>8<br>5<br>2 | 0<br>4<br>9<br>1<br>1 | 0<br>6<br>6<br>1<br>2 | 0<br>6<br>6<br>2<br>1 | 0<br>6<br>6<br>2<br>2 | 0<br>6<br>6<br>3<br>2 | 0<br>6<br>6<br>3<br>1 | 0<br>6<br>6<br>4<br>2 | 0<br>6<br>6<br>5<br>1 | 0<br>6<br>6<br>5<br>2 | 0<br>6<br>6<br>5<br>1 | 0<br>8<br>7<br>5<br>1 | 0<br>8<br>7<br>5<br>2 | 0<br>8<br>7<br>6<br>1 | 0<br>8<br>7<br>6<br>2 | 0<br>8<br>7<br>7<br>1 | 0<br>8<br>7<br>7<br>2 | 0<br>8<br>7<br>8<br>1 | 0<br>8<br>7<br>8<br>2 | 0<br>8<br>7<br>8<br>1 | 0<br>8<br>9<br>9<br>2 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Lymph Node, Mesenteric           | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Spleen                           | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | 47 |     |
| Hematopoietic Cell Proliferation |   |   |   |   |   | 4 |   |   |   | 2 |   | 2 |   |   |   |   | 1 |   |   |   |   |   |   |   | 11 | 2.0 |
| Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.5 |
| Necrosis                         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Pigmentation                     |   |   |   |   | 1 | 2 |   | 2 | 1 | 3 |   | 2 |   | 2 |   | 1 |   |   |   | 3 | 2 | 3 |   |   | 23 | 2.0 |
| Thymus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Atrophy                          | 2 | 2 |   | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 47 | 3.8 |

**INTEGUMENTARY SYSTEM**

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Fibrosis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Galactocele                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 2  |     |
| Alveolus, Degeneration        |   |   | 4 |   |   | 4 | 4 |   |   | 2 | 4 |   |   | 4 | 4 | 2 | 3 |   | 4 |   |   |   |   |   | 22 | 3.5 |
| Alveolus, Dilatation          |   |   |   |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 3 | 2 | 2 |   |   | 10 | 2.2 |
| Duct, Dilatation              |   |   |   |   | 2 |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   | 3 | 3 | 3 |   |   | 11 | 2.5 |
| Skin                          |   |   |   |   |   |   | + |   |   |   | + | + |   |   | + | + | + |   |   |   | + |   |   | + | 14 |     |
| Angiectasis                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Cyst Epithelial Inclusion     |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | X |   | 6  |     |
| Fibrosis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Inflammation, Granulomatous   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Inflammation, Chronic Active  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Necrosis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Ulcer                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Epithelium, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Epithelium, Foot, Hyperplasia |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   |   |   | 4  | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 0<br>4<br>6<br>1      | 0<br>3<br>4<br>3      | 0<br>5<br>1<br>8      | 0<br>4<br>7<br>4      | 0<br>5<br>8<br>3      | 0<br>4<br>9<br>1      | 0<br>6<br>3<br>1      | 0<br>3<br>9<br>2      | 0<br>6<br>1<br>0      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>0      | 0<br>5<br>4<br>5      | 0<br>2<br>4<br>6      | 0<br>4<br>8<br>7      | 0<br>7<br>2<br>9      | 0<br>3<br>6<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>8      | 0<br>7<br>2<br>6      | 0<br>7<br>2<br>8      |                       | 0<br>7<br>2<br>8      | 0<br>7<br>1<br>4      | 0<br>6<br>0<br>9      | 0<br>6<br>2<br>7      |                       |
| ANIMAL ID   | 0<br>4<br>8<br>3<br>2 | 0<br>4<br>8<br>4<br>1 | 0<br>4<br>8<br>4<br>2 | 0<br>4<br>8<br>4<br>1 | 0<br>4<br>8<br>5<br>2 | 0<br>6<br>9<br>1<br>1 | 0<br>6<br>9<br>2<br>2 | 0<br>6<br>9<br>2<br>1 | 0<br>6<br>9<br>2<br>3 | 0<br>6<br>9<br>3<br>2 | 0<br>6<br>9<br>4<br>1 | 0<br>6<br>9<br>4<br>2 | 0<br>6<br>9<br>5<br>1 | 0<br>6<br>9<br>5<br>2 | 0<br>6<br>7<br>5<br>1 | 0<br>6<br>8<br>5<br>1 | 0<br>6<br>8<br>5<br>2 | 0<br>6<br>8<br>6<br>1 | 0<br>6<br>7<br>7<br>1 | 0<br>8<br>7<br>7<br>2 | 0<br>8<br>7<br>7<br>1 | 0<br>8<br>7<br>8<br>2 | 0<br>8<br>7<br>8<br>1 | 0<br>8<br>7<br>9<br>2 | 0<br>8<br>7<br>9<br>1 | 0<br>8<br>7<br>9<br>2 |

|                                    |   |   |  |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|------------------------------------|---|---|--|--|--|---|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Foot, Edema                        | 4 | 4 |  |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 4.0 |
| Foot, Fibrosis                     |   |   |  |  |  | 4 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4.0 |
| Foot, Inflammation, Chronic Active |   |   |  |  |  | 4 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4.0 |
| Foot, Necrosis                     |   |   |  |  |  | 4 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4.0 |
| Foot, Ulcer                        |   |   |  |  |  | 4 |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4.0 |

**MUSCULOSKELETAL SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 2 |    |     |     |
| Bone, Femur<br>Fibrous Osteodystrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2   | 2.5 |
| Skeletal Muscle<br>Degeneration       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 1 | 1  | 4.0 |     |

**NERVOUS SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Brain, Brain Stem<br>Compression          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | 10  | 2.2 |
| Cyst                                      |   |   |   |   |   | 2 | 2 | 3 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1   | 3.0 |
| Hemorrhage                                |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1   | 3.0 |
| Pigmentation                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1   | 3.0 |
| Thrombosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |     |
| Brain, Cerebellum                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |
| Brain, Cerebrum<br>Compression<br>Gliosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | 1   | 3.0 |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1  | 3.0 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | * TOTALS |          |          |          |      |
|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|
|   | 04<br>61    | 03<br>43 | 05<br>18 | 04<br>74 | 05<br>83 | 04<br>91 | 06<br>31 | 03<br>61 | 06<br>92 | 07<br>70 | 07<br>27 | 05<br>45 | 02<br>86 | 04<br>77 | 03<br>69 | 07<br>27 | 07<br>06 | 06<br>78 | 07<br>28 | 07<br>28 |          | 07<br>14 | 06<br>09 | 06<br>67 |      |
| ANIMAL ID   | 0832        | 0481     | 0482     | 0485     | 0489     | 0491     | 0662     | 0666     | 0669     | 0669     | 0669     | 0669     | 0669     | 0669     | 0669     | 0887     | 0887     | 0888     | 0888     | 0888     | 0888     | 0888     | 0888     | 0889     | 0889 |

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   |     |     |     |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|---|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|---|-----|-----|---|-----|-----|-----|
| Hemorrhage                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 2.0 |   |     |     |   |     |     |     |
| Necrosis                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     | 1 | 3.0 |     |   |     |     |     |
| Ventricle, Dilatation     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  | 2 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1   | 3 | 5   | 1.8 |   |     |     |     |
| Nerve Trigeminal          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     | 9   |   |     |     |     |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     | 6 | 1.7 |     |     |
| Peripheral Nerve, Sciatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     | 9 |     |     |     |
| Peripheral Nerve, Tibial  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     | 9 |     |     |     |
| Spinal Cord, Cervical     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     | 8 |     |     |     |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   | 3   | 1.0 |     |
| Spinal Cord, Lumbar       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   | 8   |     |     |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   |     | 7   | 2.1 |
| Spinal Cord, Thoracic     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   | 8   |     |     |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |   |     |     |   |     | 2   | 1.0 |

RESPIRATORY SYSTEM

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |    |     |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--|----|-----|
| Lung                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 38 |  |    |     |
| Congestion                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 4  | 4.0 |
| Foreign Body                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 1  |     |
| Infiltration Cellular, Histiocyte |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 13 | 1.6 |
| Inflammation, Granulomatous       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 2  | 2.0 |
| Inflammation, Chronic Active      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 1  | 1.0 |
| Alveolar Epithelium, Hyperplasia  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  | 2  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|
|   | 04          | 03 | 05 | 04 | 05 | 04 | 06 | 03 | 06 | 07 | 07 | 05 | 02 | 04 | 07 | 03 | 07 | 07 | 06 | 07 |          | 07 | 06 | 07 | 07 |
| ANIMAL ID   | 04          | 04 | 04 | 04 | 04 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08       | 08 | 08 | 08 | 08 |
|   | 8           | 8  | 8  | 8  | 8  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 9  | 7  | 7  | 7  | 7  | 7  | 7        | 7  | 7  | 7  | 7  |
|   | 3           | 4  | 4  | 4  | 5  | 5  | 1  | 1  | 2  | 2  | 3  | 3  | 4  | 4  | 5  | 5  | 5  | 6  | 6  | 7  | 7        | 8  | 8  | 9  | 9  |
|   | 2           | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1  | 2  | 1        | 2  | 1  | 2  | 2  |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 34     |
| Autolysis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1 4.0  |
| Fibrous Osteodystrophy                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4      |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5 2.2  |
| Inflammation, Chronic Active                          |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |   | 3 |   |   |   | 2 |   |   |   |   |   |   |   |   | 3 | 2 | 4 |   |   |   | 4 | 4 |   | 13 2.9 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 3 |   |   | 4 2.8  |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 6 2.2  |
| Trachea   | A | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | A | 27     |

SPECIAL SENSES SYSTEM

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Eye                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |
| Cataract             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0 |
| Retina, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 4.0 |

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Accumulation, Hyaline Droplet            |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 2 4.0  |
| Casts Protein                            |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   | 2 |   |   |   |   | 2 |   | 8 1.5  |
| Mineralization                           |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 5 2.8  |
| Nephropathy                              | 2 | 2 |   | 2 | 4 | 4 | 3 |   | 4 | 4 | 2 | 3 | 1 | 2 | 4 | 2 | 4 | 2 | 3 | 1 | 3 | 3 | 4 | 2 | 4 | 45 2.9 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0BPA M | DAY ON TEST      |                  | ANIMAL ID        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | * TOTALS |                  |                  |    |     |     |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------|------------------|------------------|----|-----|-----|
|   | 0<br>4<br>6<br>1 | 0<br>3<br>4<br>3 | 0<br>5<br>1<br>8 | 0<br>4<br>7<br>4 | 0<br>5<br>8<br>3 | 0<br>4<br>9<br>1 | 0<br>6<br>3<br>1 | 0<br>6<br>9<br>2 | 0<br>3<br>1<br>0 | 0<br>6<br>2<br>7 | 0<br>7<br>2<br>0 | 0<br>7<br>5<br>7 | 0<br>2<br>4<br>5 | 0<br>4<br>8<br>6 | 0<br>7<br>2<br>7 | 0<br>3<br>6<br>9 | 0<br>7<br>2<br>7 | 0<br>6<br>0<br>6 | 0<br>7<br>1<br>8 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>7<br>1<br>4 |          | 0<br>6<br>0<br>9 | 0<br>6<br>2<br>7 |    |     |     |
| Polyarteritis                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  | 1  | 2.0 |     |
| Artery, Intima, Proliferation                       |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 3.0 |
| Cortex, Cyst  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  | X                | X                |                  |          |                  |                  |    | 10  |     |
| Pelvis, Dilatation                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 2.0 |
| Renal Tubule, Cyst                                  | X                |                  |                  | X                |                  | X                |                  |                  | X                | X                |                  |                  |                  | X                | X                |                  |                  |                  | X                | X                | X                | X                |          |                  | X                | 21 |     |     |
| Renal Tubule, Hyperplasia, Atypical                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  | 2  | 2.5 |     |
| Transitional Epithelium, Hyperplasia                |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |          | 2                |                  | 7  | 1.6 |     |
| Urinary Bladder                                     |                  |                  |                  |                  |                  |                  |                  |                  | +                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  | 5  |     |     |
| Fibrosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 3.0 |
| Hemorrhage  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 3.0 |
| Inflammation, Chronic Active                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 3.0 |
| Necrosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 1   | 3.0 |
| Lumen, Dilatation                                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |          |                  |                  |    | 4   | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |                    |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST | 0302  | 0502  | 0502  | 0501  | 0705  | 0706  | 0509  | 0707  | 0506  | 0601  | 0708  | 0707  | 0400  | 0708  | 0709  | 0409  | 0708  | 0608  | 0402  | 0507  | 0707  | 0701  | 0603  | 0706  | 0709 | males<br>(cont...) |
|   | ANIMAL ID   | 00651 | 00661 | 00662 | 00667 | 00671 | 00672 | 00681 | 00682 | 00688 | 00691 | 00692 | 00698 | 00699 | 00701 | 00702 | 00703 | 00704 | 00708 | 00709 | 00711 | 00712 | 00717 | 00718 | 00719 |      |                    |
|   |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    |                    |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                                       | + | + | + | + |   |   | + |   | + | + |   |   | + |   | + |   | + | + | + | + |   |   |   |   | + |   |
| Intestine Large, Colon                          | + | + | + | + |   |   | + |   | + | + |   |   | + |   | + |   | A | + | + | A |   |   |   |   | + |   |
| Intestine Small, Duodenum                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |
| Intestine Small, Ileum                          | + | + | + | + |   |   | + |   | + | + |   |   | + |   | + |   | A | + | + | A |   |   |   |   | + |   |
| Intestine Small, Jejunum<br>Metaplasia, Osseous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis                                     |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Bacterium                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Clear Cell Focus                                |   |   |   | X | X |   |   |   | X |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   | X |   |
| Degeneration, Cystic                            |   |   |   |   |   | 3 | 1 |   |   |   |   | 2 | 1 |   | 2 |   |   |   | 1 |   | 1 |   | 1 |   | 3 |   |
| Fatty Change                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Hematopoietic Cell Proliferation                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule                      |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell         |   |   |   | 1 | 1 | 2 | 1 | 1 | 2 |   | 1 | 2 | 1 |   | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |   | 2 |   |
| Inflammation, Chronic Active                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Tension Lipidosis                               |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic                       |   |   |   | 2 |   |   |   |   |   | 3 |   | 1 | 2 |   |   | 2 |   |   | 2 |   | 4 |   |   |   |   |   |
| Bile Duct, Hyperplasia                          |   |   |   |   | 1 |   | 2 | 1 |   | 3 | 1 |   | 3 |   |   | 2 |   |   | 2 |   |   | 1 |   | 2 | 4 | 1 |
| Biliary Tract, Fibrosis                         |   |   |   |   |   | 1 |   |   | 1 |   | 1 | 3 |   |   |   | 1 |   |   |   | 1 | 2 |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0305  | 0305  | 0305  | 0307  | 0307  | 0305  | 0307  | 0305  | 0306  | 0307  | 0307  | 0304  | 0307  | 0307  | 0304  | 0307  | 0306  | 0304  | 0305  | 0307  | 0307  | 0307  | 0306  |                    |
| ANIMAL ID   | 00651       | 00665 | 00666 | 00666 | 00667 | 00667 | 00668 | 00668 | 00666 | 00666 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668              |
| Hepatocyte, Degeneration                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Hepatocyte, Necrosis                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |
| Oval Cell, Hyperplasia                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4 2                |
| Mesentery   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Fat, Necrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |
| Oral Mucosa   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pancreas  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Basophilic Focus                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Cyst Multilocular                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Infiltration Cellular, Lymphocyte                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Lipomatosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Necrosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pigmentation  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Polyarteritis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Thrombosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Acinus, Degeneration                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Stomach, Forestomach                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Stomach, Glandular                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |

CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID             | males<br>(cont...) |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|--------------------|
|   | 0<br>3<br>0<br>2 | 0<br>5<br>8<br>2 | 0<br>5<br>4<br>2 | 0<br>5<br>4<br>1 | 0<br>7<br>2<br>5 | 0<br>7<br>2<br>6 | 0<br>5<br>8<br>9 | 0<br>7<br>2<br>7 | 0<br>5<br>8<br>6 | 0<br>7<br>2<br>1 | 0<br>5<br>6<br>8 | 0<br>7<br>2<br>3 | 0<br>6<br>2<br>2 | 0<br>7<br>2<br>8 | 0<br>4<br>2<br>9 | 0<br>7<br>2<br>8 | 0<br>6<br>7<br>8 | 0<br>4<br>1<br>2 | 0<br>5<br>6<br>7 | 0<br>7<br>0<br>0 | 0<br>7<br>2<br>7 | 0<br>7<br>3<br>1 | 0<br>6<br>6<br>9 | 0<br>7<br>2<br>6 |                       |                    |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0<br>0<br>6<br>5<br>1 | males<br>(cont...) |

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy       |   | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 1 | 2 | 2 |   | 2 | 1 | 1 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 2 | 2 |
| Mineralization       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Myocardium, Necrosis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Angiectasis                       |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |
| Hyperplasia                       |   |   |   |   |   |   |   |   | 1 |   |   | 1 | 2 |   | 1 |   |   |   |   |   |   |   | 2 |   |   |
| Hypertrophy                       |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic         |   | 2 |   | 3 |   | 2 | 2 | 2 | 1 |   | 2 | 2 |   | 2 | 2 |   | 3 | 2 | 2 | 1 |   | 2 |   | 2 |   |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia     |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 2 |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia       |   | 1 |   | 1 |   |   |   | 1 | 1 |   |   | 1 |   | 1 |   |   |   | 1 |   | 2 |   |   |   | 2 |   |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis     |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0308  | 0304  | 0304  | 0307  | 0307  | 0305  | 0307  | 0305  | 0306  | 0307  | 0307  | 0304  | 0307  | 0307  | 0304  | 0307  | 0306  | 0304  | 0305  | 0307  | 0307  | 0307  | 0306  |                    |
| ANIMAL ID   | 00651       | 00665 | 00666 | 00666 | 00667 | 00667 | 00668 | 00666 | 00666 | 00666 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668              |
| Pars Distalis, Cyst                                 |             | X     |       |       |       |       | X     |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |                    |
| Pars Distalis, Cyst Multilocular                    |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |                    |
| Pars Distalis, Hyperplasia                          |             |       | 1     | 3     |       | 2     | 2     |       |       |       |       |       | 3     |       | 2     | 3     |       |       |       |       |       | 3     |       | 2     |                    |
| Pars Distalis, Hypertrophy                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Thyroid Gland                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  |
| Ultimobranchial Cyst                                |             |       | X     |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |                    |
| C-cell, Hyperplasia                                 |             |       |       |       | 2     | 1     | 1     | 1     | 1     | 3     | 1     | 2     |       | 1     |       |       |       |       |       | 1     |       | 2     | 2     |       | 1                  |
| Follicular Cell, Hyperplasia                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       | 3                  |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Exfoliated Germ Cell              |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 3 |   | 1 | 2 |
| Hypospermia                       |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   |   |   | 3 |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   | 1 |   |   |   |   | 1 | 1 |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat Pad, Epididymal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Preputial Gland                   |   |   | + |   |   |   |   | + |   |   | + |   |   | + | + |   |   |   |   | + | + |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | ANIMAL ID   | 3 | 5 | 5 | 5 | 7 | 7 | 5 | 7 | 5 | 6 | 7 | 7 | 4 | 7 | 7 | 4 | 7 | 6 | 4 | 5 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 6 |
|   |             | 0 | 8 | 4 | 4 | 2 | 2 | 8 | 2 | 8 | 3 | 2 | 2 | 8 | 2 | 2 | 4 | 2 | 7 | 1 | 6 | 0 | 2 | 3 | 6 | 2 | 2 | 6 |   |
|   |             | 2 | 2 | 2 | 1 | 5 | 6 | 9 | 7 | 6 | 1 | 8 | 7 | 0 | 8 | 9 | 9 | 8 | 8 | 2 | 7 | 0 | 7 | 1 | 9 | 6 | 2 | 6 |   |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|   |             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |
|   |             | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 8 | 9 |   |   |
|   |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |

males  
(cont...)

Atrophy  
 Hyperkeratosis  
 Inflammation, Suppurative 4 4 4  
 Duct, Dilatation 4 4 4 3

Prostate, Dorsal/lateral Lobe +  
 Atrophy + 3  
 Cyst, Mucinous X  
 Fibrosis 1 2 2 4  
 Infiltration Cellular, Lymphocyte 1 1 2 2 1 1 2 1 4  
 Inflammation, Suppurative 2 2 1 2 1 2 2 2 2 1 2 2 3 3 2 1 2 4 1 2 2 2

Prostate, Ventral Lobe +  
 Atrophy + 3  
 Fibrosis 1 1 1 1 1 4  
 Infiltration Cellular, Lymphocyte 1 1 2 2 3 1 1 4 1  
 Inflammation, Suppurative 1 2 2 4  
 Mineralization 2  
 Epithelium, Hyperplasia 1 2 2 3 1

Seminal Vesicle + + + + + + + + + + + + + + + + A + + + + + + + +  
 Atrophy + 4  
 Inflammation, Suppurative 3  
 Inflammation, Chronic Active  
 Necrosis  
 Polyarteritis  
 Epithelium, Hyperplasia 3 3 3

Testes +  
 Polyarteritis 2 1 1 3 1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0308  | 0304  | 0304  | 0307  | 0307  | 0305  | 0307  | 0305  | 0306  | 0307  | 0307  | 0304  | 0307  | 0307  | 0304  | 0307  | 0306  | 0304  | 0305  | 0307  | 0307  | 0307  | 0306  |                    |
| ANIMAL ID   | 00651       | 00665 | 00666 | 00666 | 00666 | 00666 | 00666 | 00666 | 00666 | 00666 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668              |
| Seminiferous Tubule, Degeneration                   | 2           |       | 1     | 4     | 1     | 1     |       |       |       | 1     | 2     | 2     | 1     | 4     | 2     | 1     |       |       | 4     | 4     | 2     |       | 2     | 3     | 1                  |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Myeloid Cell, Hyperplasia                  |   |   | 4 |   |   | 4 |   |   |   |   | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                 | + |   |   |   | + |   |   |   | + | + |   |   | + |   | + |   |   |   |   |   | + |   |   | + |
| Iliac, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Lumbar, Degeneration, Cystic               |   |   |   |   | 2 |   |   |   |   | 4 | 4 |   | 4 |   | 4 |   |   |   |   |   |   | 4 |   | 4 |
| Lumbar, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Mediastinal, Hemorrhage                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Renal, Hemorrhage                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Pigmentation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                     | + |   | + |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   | + |
| Degeneration, Cystic                       |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 |
| Hyperplasia, Lymphoid                      |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Plasma Cell         |   |   |   | 2 |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   | 4 |
| Lymph Node, Mesenteric                     | + |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphoid                      |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                               |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic Cell Proliferation           |   |   |   | 1 | 2 |   |   |   |   |   |   | 2 |   |   | 1 |   |   |   |   |   |   | 1 |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0502  | 0502  | 0504  | 0705  | 0707  | 0508  | 0709  | 0507  | 0606  | 0701  | 0708  | 0407  | 0708  | 0409  | 0709  | 0608  | 0402  | 0507  | 0700  | 0707  | 0703  | 0606  | 0706  |                    |
| ANIMAL ID   | 00651       | 00661 | 00661 | 00666 | 00667 | 00668 | 00668 | 00669 | 00669 | 00671 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 | 00672 |                    |
| Hyperplasia, Lymphoid Necrosis                      |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pigmentation  |             | 2     | 2     |       | 2     |       |       |       |       | 2     | 2     | 2     |       | 1     |       |       | 2     |       | 4     | 1     | 1     |       |       | 2     |                    |
| Polyarteritis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Thymus Atrophy                                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
|   |             | 4     | 3     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     |                    |

INTEGUMENTARY SYSTEM

|                                    |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
|------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|--|---|---|---|--|---|
| Mammary Gland Atypical Focus       |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
| Galactocele                        |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
| Hyperplasia, Lobular               |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
| Alveolus, Degeneration             |  |   | 3 |   |   |   |   | 4 |   |   |   |   | 3 |  | 4 | 3 |   | 3 |  |   |   | 4 |  | 4 |
| Alveolus, Dilatation               |  |   |   |   |   |   |   |   |   | 3 | 3 | 2 |   |  |   |   |   | 3 |  | 3 | 2 |   |  | 4 |
| Duct, Dilatation                   |  |   |   |   |   |   |   |   |   | 3 | 3 | 3 | 2 |  |   |   |   | 3 |  | 3 | 3 |   |  | 2 |
| Skin                               |  | + |   | + | + | + |   |   | + | + | + | + |   |  | + | + |   |   |  |   |   |   |  | + |
| Cyst Epithelial Inclusion          |  |   |   | X | X |   |   |   | X |   | X | X |   |  |   |   |   |   |  |   |   |   |  | X |
| Inflammation, Suppurative          |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
| Ulcer                              |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |
| Epithelium, Foot, Hyperplasia      |  |   |   |   |   |   | 4 |   |   |   | 4 |   |   |  |   |   | 4 |   |  |   |   |   |  | 4 |
| Foot, Edema                        |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  | 4 |
| Foot, Fibrosis                     |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  | 4 |
| Foot, Inflammation, Chronic Active |  |   |   |   |   |   | 4 |   |   |   | 4 |   |   |  |   |   |   |   |  |   |   |   |  | 4 |
| Foot, Necrosis                     |  |   |   |   |   |   | 4 |   |   |   | 4 |   |   |  |   |   |   |   |  |   |   |   |  | 4 |
| Foot, Ulcer                        |  |   |   |   |   |   | 4 |   |   |   | 4 |   |   |  |   |   |   |   |  |   |   |   |  | 4 |

MUSCULOSKELETAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |           | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |
|--|-----------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 2500.BPA M</b> | ANIMAL ID | 0302        | 0305 | 0305 | 0305 | 0307 | 0307 | 0305 | 0307 | 0305 | 0306 | 0307 | 0307 | 0304 | 0307 | 0307 | 0304 | 0307 | 0306 | 0304 | 0305 | 0307 | 0307 | 0307 | 0306 |                    | 0307 |
|  |           | 0006        | 0006 | 0006 | 0006 | 0006 | 0006 | 0006 | 0006 | 0006 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0008 | 0009 | 0009 | 0007 | 0007 |                    | 0007 |
|  |           | 51          | 52   | 61   | 62   | 71   | 72   | 81   | 82   | 91   | 92   | 11   | 12   | 21   | 22   | 31   | 32   | 41   | 42   | 51   | 52   | 71   | 72   | 81   | 82   | 91                 |      |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone<br>Tibia, Hyperostosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Bone, Femur<br>Fibrous Osteodystrophy<br>Osteopetrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|---|--|
| Brain, Brain Stem<br>Compression<br>Hemorrhage<br>Necrosis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   | 3 |   |   |   | 3 | 2 |   |   |   |   |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |   |  |
| Brain, Cerebellum<br>Hemorrhage<br>Necrosis                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |  |   |  |   |  |
| Brain, Cerebrum<br>Compression<br>Hemorrhage<br>Necrosis<br>Ventricle, Dilatation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |  |   |  |   |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  | 1 |  | 1 |  |
| Nerve Trigeminal<br>Axon, Degeneration  |   |   |   | + |   |   |   |   | + |   |   | + | + |   |   |   | + | + |   |   | + | + |   |   |   |  |   |  |   |  |
|   |   |   |   | 3 |   |   |   |   | 1 | + |   |   |   | 2 | 3 | 1 |   |   | 1 | 1 |   |   |   |   |   |  |   |  |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0305  | 0305  | 0305  | 0307  | 0307  | 0305  | 0307  | 0305  | 0306  | 0307  | 0307  | 0304  | 0307  | 0307  | 0304  | 0307  | 0306  | 0304  | 0305  | 0307  | 0307  | 0307  | 0306  |                    |
| ANIMAL ID   | 00651       | 00661 | 00662 | 00667 | 00671 | 00682 | 00688 | 00699 | 00691 | 00692 | 00691 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692 | 00692              |

|  |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Peripheral Nerve, Sciatic              | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peripheral Nerve, Tibial               | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spinal Cord, Cervical Hemorrhage       | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spinal Cord, Lumbar Axon, Degeneration | 1 2 1 1 1 3 1 1 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spinal Cord, Thoracic                  | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

RESPIRATORY SYSTEM

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Lung  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Congestion  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Foreign Body  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Infiltration Cellular, Histiocyte                   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Inflammation, Suppurative                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Inflammation, Granulomatous                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Alveolar Epithelium, Hyperplasia                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Pleura, Inflammation, Suppurative                   | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Nose  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Autolysis   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Fibrous Osteodystrophy                              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Foreign Body  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |
| Inflammation, Suppurative                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0302        | 0305  | 0305  | 0305  | 0307  | 0307  | 0305  | 0307  | 0305  | 0306  | 0307  | 0307  | 0304  | 0307  | 0307  | 0304  | 0307  | 0306  | 0304  | 0305  | 0307  | 0307  | 0307  | 0306  |                    |
| ANIMAL ID   | 00651       | 00665 | 00666 | 00666 | 00667 | 00667 | 00668 | 00666 | 00666 | 00666 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 | 00668 |                    |

Respiratory Epithelium, Hyperplasia, Goblet Cell

2 2

Trachea

+ + + + + + + + + + + + + + + + +

SPECIAL SENSES SYSTEM

Eye

+

Cataract

4

Fibrosis

4

Cornea, Inflammation, Chronic Active

4

Cornea, Ulcer

4

Zymbal's Gland

Fibrosis

Inflammation, Suppurative

Duct, Dilatation

URINARY SYSTEM

Kidney

+ +

Accumulation, Hyaline Droplet

4

Infiltration Cellular, Polymorphonuclear

2

1

Mineralization

Nephropathy

4 1 3 2 4 1 4 4 1 4 4 3 2 2 2 3 2 3 3 3 2 3 4

Polyarteritis

Polycystic Kidney

Cortex, Cyst

X X X X X X X X X X

Renal Tubule, Cyst

X X X X X X X X X X

Transitional Epithelium, Hyperplasia

1 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE DAWLEY (NCTR) | 3 | 5 | 5 | 5 | 7 | 7 | 5 | 7 | 5 | 6 | 7 | 7 | 4 | 7 | 7 | 4 | 7 | 6 | 4 | 5 | 7 | 7 | 7 | 0 |
| RATS MALE             | 0 | 8 | 4 | 4 | 2 | 2 | 8 | 2 | 8 | 3 | 2 | 2 | 8 | 2 | 2 | 4 | 2 | 7 | 1 | 6 | 0 | 2 | 3 | 6 |
| F1 2500.BPA M         | 2 | 2 | 2 | 1 | 5 | 6 | 9 | 7 | 6 | 1 | 8 | 7 | 0 | 8 | 9 | 9 | 8 | 8 | 2 | 7 | 0 | 7 | 1 | 9 |
| ANIMAL ID             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                       | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
|                       | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 |   |
|                       | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 |   |
|                       | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |

males  
(cont...)

Urinary Bladder  
Lumen, Dilatation

+  
4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|   | 0466        | 0788 | 0571 | 0727 | 0527 | 0652 | 0532 | 0369 | 0645 | 0414 | 0636 | 0668 | 0544 | 0712 | 0772 | 0778 | 0778 | 0733 | 0544 | 0769 |          | 0667 | 0382 |
| ANIMAL ID   | 0499        | 0500 | 0500 | 0501 | 0501 | 0501 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502 | 0502     | 0502 | 0502 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
|   | 4           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8        | 8    | 8    |
|   | 9           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8    | 8    | 9    | 9    | 9    | 9        | 9    | 9    |
|   | 9           | 0    | 0    | 1    | 1    | 1    | 5    | 5    | 6    | 7    | 8    | 8    | 9    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2        | 3    | 3    |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2        | 1    | 2    |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|--|
| Esophagus                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | +   | 34  |     |  |
| Intestine Large, Colon                          | + | + | A | + | + | + | + | + | + | A | A | + | + | + | A | + | + | + | A | + | 27 |     |     |     |  |
| Intestine Small, Duodenum                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |     |  |
| Intestine Small, Ileum                          | + | + | A | + | + | A | + | + | + | A | A | + | + | + | A | + | + | + | A | A | 25 |     |     |     |  |
| Intestine Small, Jejunum<br>Metaplasia, Osseous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 1   | 3.0 |  |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | +   | 50  |     |  |
| Angiectasis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 2.0 |     |  |
| Bacterium                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |     |  |
| Basophilic Focus                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   |     |     |  |
| Clear Cell Focus                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 10  |     |     |  |
| Degeneration, Cystic                            | 1 | 1 |   | 2 |   |   |   |   |   | 2 | 2 |   | 1 | 1 | X | X |   | X |   |   | 18 | 1.6 |     |     |  |
| Fatty Change                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4   | 2.3 |     |  |
| Hematopoietic Cell Proliferation                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.0 |     |  |
| Hemorrhage                                      | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     | 1   | 4.0 |  |
| Hepatodiaphragmatic Nodule                      |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     | 7   |  |
| Infiltration Cellular, Mononuclear Cell         | 2 |   | 2 |   | 2 |   |   | 1 |   | 2 | 2 | 1 | 2 | 1 | 1 |   | 1 | 1 | 2 | 1 | 1  | 1   | 34  | 1.4 |  |
| Inflammation, Chronic Active                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |     |  |
| Mixed Cell Focus                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |     |  |
| Tension Lipidosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.0 |     |  |
| Vacuolization Cytoplasmic                       | 3 |   | 2 |   | 1 |   | 1 |   |   | 1 |   |   | 4 |   |   | 4 |   |   | 2 |   |    | 14  | 2.1 |     |  |
| Bile Duct, Hyperplasia                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 16  | 2.1 |     |  |
| Biliary Tract, Fibrosis                         | 2 |   | 2 |   | 1 |   | 3 |   | 1 |   |   | 3 |   |   |   | 1 |   | 2 | 1 | 1 |    | 2   | 19  | 1.6 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |       |        |       |        |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|-------|--------|-------|--------|
|   | 0466        | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 | 0478 |          | 0478 | 0478  |        |       |        |
| ANIMAL ID   | 0499        | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499 | 0499     | 0499 |       |        |       |        |
| Hepatocyte, Degeneration                            | 3           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1 3.0 |        |       |        |
| Hepatocyte, Necrosis                                | 3           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    | 4        |      | 4 3.0 |        |       |        |
| Oval Cell, Hyperplasia                              |             |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 3 2.3 |        |       |        |
| Mesentery   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1     |        |       |        |
| Fat, Necrosis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1 4.0 |        |       |        |
| Oral Mucosa   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1     |        |       |        |
| Pancreas  | +           | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +        | +    | +     | 48     |       |        |
| Basophilic Focus                                    | X           |      |      |      |      | X    |      |      |      |      |      |      |      |      | X    | X    |      |      |      |      |          |      | 4     |        |       |        |
| Cyst Multilocular                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | X    | 1     |        |       |        |
| Hemorrhage  |             |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |          |      | 1 4.0 |        |       |        |
| Infiltration Cellular, Lymphocyte                   | 2           | 3    |      | 1    | 1    | 2    |      |      | 2    | 2    |      | 1    | 2    | 3    | 2    | 1    | 2    | 2    |      | 2    | 2        | 2    | 2     | 38 1.9 |       |        |
| Lipomatosis   |             |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 4    |      |      | 2    |      | 4    |          |      |       | 11 2.9 |       |        |
| Necrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |       | 1 4.0  |       |        |
| Pigmentation  | 1           | 1    |      |      |      | 1    |      | 3    | 2    | 1    |      |      |      | 2    | 2    | 1    | 2    |      |      | 1    | 1        | 2    | 1     | 30 1.4 |       |        |
| Polyarteritis                                       |             |      |      |      |      |      |      |      |      | 2    |      |      |      |      | 4    |      |      |      |      |      |          |      |       | 2 3.0  |       |        |
| Thrombosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |          |      |       | 1      |       |        |
| Acinus, Degeneration                                | 4           | 3    | 3    | 2    | 2    | 2    |      | 4    | 3    | 3    | 2    | 2    | 1    | 2    | 4    | 4    | 2    | 2    | 2    |      | 4        | 4    | 3     | 4      | 3     | 44 2.8 |
| Stomach, Forestomach                                | +           | +    | A    |      | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |      | A    | +    | +        | +    | +     | +      | 32    |        |
| Epithelium, Hyperplasia                             |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      | 4    |          |      |       |        | 2 4.0 |        |
| Stomach, Glandular                                  | +           | +    | A    |      | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |      | A    | +    | +        | +    | +     | +      | 33    |        |
| Mineralization                                      |             |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |          |      |       |        | 1 4.0 |        |
| Epithelium, Hyperplasia                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |          |      |       |        | 1 4.0 |        |

CARDIOVASCULAR SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
|   | 0466        | 0708  | 0507  | 0702  | 0502  | 0609  | 0508  | 0304  | 0001  | 0605  | 0404  | 0006  | 0003  | 0606  | 0609  | 0504  | 0007  | 0007  | 0504  | 0706  |          | 0006  | 0303  | 0606  | 0303  | 0602  |
| ANIMAL ID   | 04992       | 05000 | 05000 | 05001 | 05001 | 07001 | 07002 | 07007 | 07007 | 07007 | 07007 | 07007 | 07007 | 07007 | 07007 | 07008 | 07008 | 07008 | 07008 | 07008 | 07008    | 07008 | 07008 | 07008 | 07008 | 07008 |

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Blood Vessel Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1  | 2.0 |
| Heart                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 44 | 1.9 |
| Cardiomyopathy              | 1 | 3 | 1 | 2 | 2 | 1 | 2 |   |   | 4 | 2 | 4 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 |   |   |    | 1  | 2.0 |
| Mineralization              |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |
| Myocardium, Necrosis        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |    | 1  | 3.0 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|-----|
| Adrenal Cortex                    | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 48 |    |    |     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1  |     |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1  | 2.0 |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 2  | 2.0 |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |    |    | 6  | 1.5 |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 2  | 1.5 |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |    |    | 1  | 2.0 |
| Vacuolization Cytoplasmic         |   |   |   |   |   | 2 |   |   |   | 4 |   |   |   | 1 |   |   | 2 |   |   |   |   | 2 |   |   |   |    |    | 21 | 2.0 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 | 8  | 1.6 |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   | 2 |   | 2 |   |    |    |    |     |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | +  | 49 | 1  | 4.0 |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |    |    |    |     |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 | 18 | 1.8 |
| Hyperplasia                       |   | 1 | 2 |   | 2 |   |   |   |   | 4 |   | 3 |   | 3 |   |   | 4 |   | 1 |   |   |   | 2 |   |   |    |    |    |     |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 | 9  | 3.9 |
| Angiectasis                       |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 3 |   |   |   |    |    |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|   | 0466        | 0708  | 0571  | 0727  | 0527  | 0692  | 0582  | 0349  | 0645  | 0466  | 0048  | 0039  | 0064  | 0068  | 0054  | 0072  | 0077  | 0077  | 0057  | 0064  |          | 0066  | 0038  |
| ANIMAL ID   | 04992       | 05001 | 05002 | 05003 | 05004 | 05005 | 05006 | 05007 | 05008 | 05009 | 05010 | 05011 | 05012 | 05013 | 05014 | 05015 | 05016 | 05017 | 05018 | 05019 | 05020    | 05021 | 05022 |
|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |

|                                  |  |  |  |  |  |   |   |   |  |  |   |   |   |  |   |   |   |  |  |   |   |  |  |    |     |
|----------------------------------|--|--|--|--|--|---|---|---|--|--|---|---|---|--|---|---|---|--|--|---|---|--|--|----|-----|
| Pars Distalis, Cyst              |  |  |  |  |  | X |   |   |  |  |   |   |   |  |   |   |   |  |  |   |   |  |  | 5  |     |
| Pars Distalis, Cyst Multilocular |  |  |  |  |  |   | X |   |  |  |   |   | X |  |   |   |   |  |  |   |   |  |  | 4  |     |
| Pars Distalis, Hyperplasia       |  |  |  |  |  |   |   | 3 |  |  | 2 | 2 |   |  | 2 | 1 | 4 |  |  | 1 | 1 |  |  | 17 | 2.2 |
| Pars Distalis, Hypertrophy       |  |  |  |  |  |   |   | 2 |  |  |   | 2 |   |  |   |   | 2 |  |  |   |   |  |  | 3  | 2.0 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Thyroid Gland                | + | + | A | + | + | + | A | + | + | + | A | A | + | + | + | + | + | + | A | + | + | + | + | A  | 44  |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |    | 5   |
| C-cell, Hyperplasia          |   |   | 2 |   | 3 | 2 |   |   |   |   |   |   | 2 |   |   | 1 | 1 | 2 |   |   |   |   |   | 20 | 1.6 |
| Follicular Cell, Hyperplasia |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 3.0 |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

GENITAL SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Coagulating Gland         | + | + | A | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | 46 |     |
| Atrophy                   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Exfoliated Germ Cell              |   |   | 1 |   | 2 |   | 1 |   | 2 | 3 |   |   | 2 |   |   |   | 2 |   |   | 2 | 1 |   |   | 13 | 1.8 |
| Hypospermia                       |   |   |   |   |   |   |   |   |   | 4 |   | 4 | 4 | 4 |   |   | 4 |   |   |   |   |   |   | 11 | 3.9 |
| Infiltration Cellular, Lymphocyte |   |   |   | 1 |   | 1 |   |   |   | 2 |   | 1 |   |   | 1 |   | 1 |   |   | 1 | 2 |   |   | 14 | 1.1 |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   | 2 |   | 2 |   | 2 |   |   |   |   |   |   |   | 3 |   | 4  | 2.3 |

|                              |   |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|------------------------------|---|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Fat Pad, Epididymal Necrosis | + |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |     |
|                              | 4 |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 4.0 |

|                 |  |   |   |   |  |   |  |  |  |  |  |  |  |   |   |   |  |  |  |   |  |   |  |    |
|-----------------|--|---|---|---|--|---|--|--|--|--|--|--|--|---|---|---|--|--|--|---|--|---|--|----|
| Preputial Gland |  | + | + | + |  | + |  |  |  |  |  |  |  | + | + | + |  |  |  | + |  | + |  | 16 |
|-----------------|--|---|---|---|--|---|--|--|--|--|--|--|--|---|---|---|--|--|--|---|--|---|--|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0466        | 0788  | 0571  | 0727  | 0527  | 0652  | 0582  | 0349  | 0615  | 0446  | 0038  | 0665  | 0664  | 0541  | 0722  | 0722  | 0778  | 0778  | 0530  | 0745  | 0669  | 0667  | 0382  | 0632  |          |
| ANIMAL ID   | 04992       | 05001 | 05501 | 05511 | 05715 | 07755 | 07775 | 07776 | 07777 | 07777 | 07777 | 07777 | 07777 | 07777 | 07777 | 07777 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 | 08888 |          |
| Atrophy   |             |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Hyperkeratosis                                      |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 2 4.0    |
| Inflammation, Suppurative                           |             | 4     | 2     | 4     |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       | 4     |       |       | 8 3.5    |
| Duct, Dilatation                                    |             | 4     | 2     | 3     |       |       |       |       |       |       |       |       |       | 4     |       | 3     | 4     |       |       |       | 4     |       | 4     |       | 13 3.6   |
| Prostate, Dorsal/lateral Lobe                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Atrophy   |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 2.5    |
| Cyst, Mucinous                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Fibrosis  |             |       | 2     |       |       | 2     |       |       |       |       |       |       | 2     |       | 2     |       |       | 2     |       |       |       |       |       |       | 10 2.1   |
| Infiltration Cellular, Lymphocyte                   |             | 2     | 2     |       | 2     | 1     | 1     |       | 1     |       |       | 1     | 1     | 1     |       | 1     | 1     | 1     |       |       | 2     | 2     |       |       | 27 1.4   |
| Inflammation, Suppurative                           | 1           | 2     | 2     | 1     | 3     | 2     | 2     | 2     | 2     |       |       | 2     | 1     | 2     | 2     | 2     | 2     | 3     | 3     | 2     |       | 3     | 2     | 2     | 43 2.0   |
| Prostate, Ventral Lobe                              | +           | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49       |
| Atrophy   |             |       |       |       | 3     |       |       |       | 2     |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       | 5 2.8    |
| Fibrosis  |             |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       | 4 2.8    |
| Infiltration Cellular, Lymphocyte                   | 1           |       | 2     | 1     | 1     |       |       |       |       |       |       |       |       | 2     | 1     |       |       |       | 2     |       |       |       | 1     |       | 20 1.4   |
| Inflammation, Suppurative                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5 2.4    |
| Mineralization                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Epithelium, Hyperplasia                             |             | 1     | 3     |       |       | 2     |       |       |       |       | 3     |       |       | 2     |       | 2     |       | 2     |       |       |       |       |       |       | 12 2.0   |
| Seminal Vesicle                                     | +           | +     | A     | +     | +     | +     | A     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | A     | 44       |
| Atrophy   |             |       |       |       | 3     |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3 3.3    |
| Inflammation, Suppurative                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Necrosis  |             |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Polyarteritis                                       |             |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       | 4 2.8    |
| Testes  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Polyarteritis                                       |             |       | 3     |       |       | 1     | 4     |       |       |       | 3     | 2     | 4     |       | 4     |       | 2     | 3     |       | 1     |       |       | 3     |       | 16 2.4   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |      |           |            |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|------|-----------|------------|
|   | 0466        | 0788  | 0571  | 0727  | 0527  | 0692  | 0582  | 0349  | 0615  | 0446  | 0086  | 0063  | 0095  | 0048  | 0063  | 0066  | 0054  | 0077  | 0075  | 0066  |          | 0036  | 0063 |           |            |
| ANIMAL ID   | 04992       | 05001 | 05002 | 05003 | 05004 | 05005 | 05006 | 05007 | 05008 | 05009 | 05010 | 05011 | 05012 | 05013 | 05014 | 05015 | 05016 | 05017 | 05018 | 05019 | 05020    | 05021 |      |           |            |
| Seminiferous Tubule, Degeneration                   | 1           |       | 2     | 2     |       | 2     | 1     | 1     | 4     | 1     | 4     | 4     | 4     | 4     | 1     | 1     |       | 4     | 1     | 1     | 2        | 1     | 1    | <b>38</b> | <b>2.1</b> |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |          |            |           |           |            |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------|------------|-----------|-----------|------------|
| Bone Marrow                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b> |          |            |           |           |            |
| Myeloid Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   | 4 |   |   |   |           | <b>7</b> | <b>3.7</b> |           |           |            |
| Lymph Node                                 |   | + |   |   |   |   | + | + |   | + |   |   | + | + |   |   |   |   |   |   | + | + |   | <b>16</b> |          |            |           |           |            |
| Iliac, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>4.0</b> |           |           |            |
| Lumbar, Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>7</b> | <b>3.7</b> |           |           |            |
| Lumbar, Hyperplasia, Lymphoid              |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b> | <b>4.0</b> |           |           |            |
| Lumbar, Infiltration Cellular, Plasma Cell |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>4</b> | <b>4.0</b> |           |           |            |
| Mediastinal, Hemorrhage                    |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>4.0</b> |           |           |            |
| Mediastinal, Hyperplasia, Lymphoid         |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>2.0</b> |           |           |            |
| Renal, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   | 4 |   |   |           | <b>5</b> | <b>4.0</b> |           |           |            |
| Renal, Hemorrhage                          |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b> | <b>4.0</b> |           |           |            |
| Renal, Infiltration Cellular, Plasma Cell  |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |           | <b>2</b> | <b>3.5</b> |           |           |            |
| Renal, Pigmentation                        |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>4.0</b> |           |           |            |
| Lymph Node, Mandibular                     |   |   | + |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>9</b>  |          |            |           |           |            |
| Degeneration, Cystic                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |           | <b>4</b> | <b>2.8</b> |           |           |            |
| Hyperplasia, Lymphoid                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3 |           | <b>5</b> | <b>3.2</b> |           |           |            |
| Infiltration Cellular, Plasma Cell         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |           | <b>7</b> | <b>3.7</b> |           |           |            |
| Lymph Node, Mesenteric                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  |          |            |           |           |            |
| Hyperplasia, Lymphoid                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>3.0</b> |           |           |            |
| Pigmentation                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> | <b>3.0</b> |           |           |            |
| Spleen                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | +         | +        | +          | <b>49</b> |           |            |
| Hematopoietic Cell Proliferation           |   | 2 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 4 |   |           |          |            |           | <b>10</b> | <b>1.8</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |   |      |                 |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|---|------|-----------------|------|-----|-----|-----|---|---|---|---|---|---|---|-----|---|---|---|---|---|--|---|---|---|----|-----|-----|--|--|---|-----|-----|
|   | 0466        | 0478 | 0051 | 0077 | 0052 | 0066 | 0055 | 0033 | 0066 | 0044 | 0055 | 0066 | 0066 | 0055 | 0077 | 0077 | 0077 | 0077 | 0055 | 0066 |           |   | 0066 | 0033            | 0066 |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0 | 0    | 0               |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 4           | 7    | 5    | 7    | 5    | 6    | 5    | 3    | 6    | 4    | 5    | 6    | 6    | 6    | 5    | 7    | 7    | 7    | 7    | 5    | 7         | 6 | 6    | 3               | 6    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 6           | 0    | 7    | 2    | 2    | 9    | 8    | 4    | 1    | 4    | 6    | 3    | 9    | 4    | 1    | 2    | 2    | 2    | 3    | 4    | 0         | 4 | 7    | 8               | 3    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 6           | 8    | 1    | 7    | 7    | 2    | 2    | 9    | 5    | 4    | 6    | 8    | 5    | 6    | 4    | 6    | 7    | 8    | 0    | 7    | 5         | 9 | 7    | 2               | 2    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0 | 0    | 0               | 0    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 4           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 8    | 8         | 8 | 8    | 8               | 8    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 9           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8    | 8    | 9    | 9    | 9    | 9    | 9         | 9 | 9    | 9               | 9    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 9           | 0    | 0    | 1    | 1    | 5    | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 9    | 9    | 9    | 9    | 0    | 1    | 1    | 2         | 2 | 3    | 3               | 3    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2         | 1 | 2    | 1               | 2    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | <b>* TOTALS</b> |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Hyperplasia, Lymphoid Necrosis                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 2               | 2    | 3   | 2.0 |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Pigmentation  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 4               | 3    | 3   | 1   | 1   | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2.2 |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Polyarteritis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      |     |     |     |   |   |   | 2 | 1 |   |   |     |   |   |   |   |   |  |   |   |   |    | 2   | 1.5 |  |  |   |     |     |
| Thymus Atrophy                                      | +           | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | +               |      | 49  |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
|   | 4           | 4    |      | 4    | 4    | 4    | 4    |      | 4    | 3    | 4    | 4    | 4    | 4    | 3    | 4    | 4    | 4    | 4    | 4    | 4         | 4 | 4    | 4               | 4    | 47  | 3.9 |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| <b>INTEGUMENTARY SYSTEM</b>                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Mammary Gland Atypical Focus                        | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | +               | +    | 50  | 1   | 2.0 |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Galactocele   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  | 1 |     |     |
| Hyperplasia, Lobular                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      |     |     |     |   |   |   |   |   |   | 1 |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  | 2 | 1.5 |     |
| Alveolus, Degeneration                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      | 3   | 3   | 4   | 4 | 4 | 2 |   | 4 | 4 |   | 4   | 3 |   | 2 | 4 | 4 |  | 3 | 3 | 4 | 25 | 3.5 |     |  |  |   |     |     |
| Alveolus, Dilatation                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 2               |      |     |     |     |   |   | 2 |   |   |   |   | 2   |   | 2 | 2 |   |   |  |   |   |   |    |     |     |  |  |   | 11  | 2.4 |
| Duct, Dilatation                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 3               | 3    |     |     |     |   |   | 3 |   |   |   |   | 2   |   | 2 | 3 |   |   |  |   |   |   |    |     |     |  |  |   | 15  | 2.7 |
| Skin  | +           |      |      |      |      |      |      |      | +    |      |      | +    |      |      |      | +    |      | +    |      | +    | +         |   |      |                 | 19   |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Cyst Epithelial Inclusion                           | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      | X    |           |   |      |                 | 9    |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Inflammation, Suppurative                           | 4           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 | 2    | 2.5 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Ulcer   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 | 1    | 2.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Epithelium, Foot, Hyperplasia                       | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 | 6    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Foot, Edema   | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |           |   |      |                 | 5    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Foot, Fibrosis                                      | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |           |   |      |                 | 7    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Foot, Inflammation, Chronic Active                  | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |           |   |      |                 | 7    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Foot, Necrosis                                      | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |           |   |      |                 | 7    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| Foot, Ulcer   | 4           |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |           |   |      |                 | 7    | 4.0 |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |
| <b>MUSCULOSKELETAL SYSTEM</b>                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |      |     |     |     |   |   |   |   |   |   |   |     |   |   |   |   |   |  |   |   |   |    |     |     |  |  |   |     |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0466        | 0788  | 0571  | 0777  | 0522  | 0692  | 0582  | 0349  | 0645  | 0466  | 0014  | 0046  | 0039  | 0068  | 0054  | 0076  | 0077  | 0072  | 0034  | 0075  | 0064  | 0067  | 0038  | 0063  |          |
| ANIMAL ID   | 04992       | 05002 | 05502 | 05512 | 05712 | 05772 | 07772 | 07772 | 07772 | 07772 | 07772 | 07772 | 07772 | 07772 | 07772 | 08882 | 08882 | 08882 | 08882 | 08882 | 08882 | 08882 | 08882 | 08882 |          |
| Bone  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Tibia, Hyperostosis                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Bone, Femur   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Fibrous Osteodystrophy                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Osteopetrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Skeletal Muscle                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |

NERVOUS SYSTEM

|                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Brain, Brain Stem     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compression           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebellum     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebrum       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compression           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ventricle, Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nerve Trigeminal      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Axon, Degeneration    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|   | 0466        | 0708  | 0571  | 0727  | 0527  | 0692  | 0582  | 0349  | 0615  | 0444  | 0636  | 0669  | 0544  | 0716  | 0722  | 0722  | 0738  | 0770  | 0547  | 0669  |          | 0667  | 0382  | 0632  |
| ANIMAL ID   | 04992       | 05001 | 05002 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001 | 05001    | 05001 | 05001 | 05001 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     |          |                |              |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|----------|----------------|--------------|
| Peripheral Nerve, Sciatic              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + + | + + +    | 14             |              |
| Peripheral Nerve, Tibial               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     | + +      | + + +          | 14           |
| Spinal Cord, Cervical Hemorrhage       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     | + +      | + + +<br>2     | 14<br>1 2.0  |
| Spinal Cord, Lumbar Axon, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     | + +<br>1 | + + +<br>2 2 1 | 14<br>13 1.5 |
| Spinal Cord, Thoracic                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     | + +      | + + +          | 14           |

**RESPIRATORY SYSTEM**

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             |                 |       |       |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|-----------------------------|-----------------|-------|-------|
| Lung  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + + + | + + + + + + + + + + + + + + | + + + + + + + + | 35    |       |
| Congestion  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             | 4               | 1 4.0 |       |
| Foreign Body  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X     | X                           |                 | 2     |       |
| Infiltration Cellular, Histiocyte                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |                             | 3               | 4 2.3 |       |
| Inflammation, Suppurative                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       | 4                           |                 | 1 4.0 |       |
| Inflammation, Granulomatous                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3     |                             |                 | 1 3.0 |       |
| Alveolar Epithelium, Hyperplasia                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             | 2               | 1 2.0 |       |
| Pleura, Inflammation, Suppurative                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             |                 | 1 1.0 |       |
| Nose  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + + A | + + + + + + + + + + + +     | A + + + + + +   | 32    |       |
| Autolysis   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             |                 | 4     | 1 4.0 |
| Fibrous Osteodystrophy                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             | 2               | 1 2.0 |       |
| Foreign Body  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             |                 | 2     |       |
| Inflammation, Suppurative                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |                             | 2               | 3 2.7 |       |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       | 3                           | 2               | 1     | 5 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.BPA M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|   | 0466        | 0708  | 0507  | 0702  | 0502  | 0609  | 0508  | 0304  | 0601  | 0404  | 0506  | 0603  | 0609  | 0504  | 0702  | 0702  | 0703  | 0504  | 0705  | 0604  |          | 0607  | 0308  | 0602  | 0306  |
| ANIMAL ID   | 04992       | 05000 | 05000 | 05001 | 05011 | 07015 | 07017 | 07017 | 07017 | 07017 | 07017 | 07017 | 07017 | 07017 | 08018 | 08018 | 08018 | 08018 | 08018 | 08018 | 08018    | 08018 | 08018 | 08018 | 08018 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     | 0     | 2     |

Respiratory Epithelium, Hyperplasia, Goblet Cell 2 2.0

Trachea + + A + + + + + + + + + + + + A + + + + + 32

**SPECIAL SENSES SYSTEM**

|                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |       |
|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-------|
| Eye                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |   |       |
| Cataract                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 4.0   |
| Fibrosis                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 4.0   |
| Cornea, Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 4.0   |
| Cornea, Ulcer                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 4.0   |
| Zymbal's Gland                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 |       |
| Fibrosis                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1 4.0 |
| Inflammation, Suppurative            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1 4.0 |
| Duct, Dilatation                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1 4.0 |

**URINARY SYSTEM**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |        |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|--------|--|
| Kidney                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |   |        |  |
| Accumulation, Hyaline Droplet            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 4 | 2 4.0  |  |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 2 | 6 1.7  |  |
| Mineralization                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 3 | 1 3.0  |  |
| Nephropathy                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 2 | 47 2.9 |  |
| Polyarteritis                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 4 | 1 4.0  |  |
| Polycystic Kidney                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 4 | 1 4.0  |  |
| Cortex, Cyst                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   | 15     |  |
| Renal Tubule, Cyst                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   | 20     |  |
| Transitional Epithelium, Hyperplasia     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 1 | 5 1.8  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                    |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST | 0<br>3<br>1<br>2      | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>1      | 0<br>7<br>2<br>8      | 0<br>5<br>4<br>2      | 0<br>3<br>7<br>2      | 0<br>5<br>0<br>0      | 0<br>7<br>0<br>0      | 0<br>3<br>3<br>1      | 0<br>6<br>4<br>5      | 0<br>6<br>8<br>2      | 0<br>7<br>2<br>7      | 0<br>5<br>3<br>5      | 0<br>4<br>6<br>5      | 0<br>3<br>8<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>6<br>4      | 0<br>7<br>2<br>6      | 0<br>3<br>0<br>5      | 0<br>6<br>3<br>8      | 0<br>6<br>5<br>6      | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>9      | 0<br>7<br>2<br>9      | males<br>(cont...) |
|   | ANIMAL ID   | 0<br>0<br>8<br>1<br>1 | 0<br>0<br>8<br>1<br>2 | 0<br>0<br>8<br>2<br>1 | 0<br>0<br>8<br>3<br>2 | 0<br>0<br>8<br>3<br>4 | 0<br>0<br>8<br>4<br>1 | 0<br>0<br>8<br>5<br>2 | 0<br>0<br>8<br>7<br>1 | 0<br>0<br>8<br>7<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>7 | 0<br>2<br>9<br>9<br>8 | 0<br>2<br>9<br>9<br>8 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>1<br>2 | 0<br>3<br>0<br>1<br>1 | 0<br>5<br>1<br>3<br>2 | 0<br>5<br>1<br>3<br>1 | 0<br>5<br>1<br>4<br>1 | 0<br>5<br>1<br>4<br>2 | 0<br>5<br>1<br>5<br>1 |                    |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + |   | + | + | + | + | + | + |   | + | + | + | + | + |   |   | + | + | + |   | + |
| Foreign Body                                     |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Periesophageal Tissue, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Periesophageal Tissue, Necrosis                  |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon                           | + | A | A |   | + | + | + | + | + | + |   | + | + | + | + | + |   |   | A | + | + |   | + |
| Fibrosis   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Goblet Cell                         |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                        |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer  |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Goblet Cell                         |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                        |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum                           | + | A | A |   | + | + | + | + | + | + |   | + | + | + | + | + |   |   | A | + | + |   | + |
| Inflammation, Suppurative                        |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Jejunum                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
| Angiectasis                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |
| Clear Cell Focus                                 |   |   |   |   | X |   | X |   |   |   |   | X |   |   |   |   |   | X | X |   |   | X |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>2<br>6 | 0<br>6<br>6<br>1 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>2 | 0<br>3<br>7<br>3 | 0<br>5<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>3<br>0<br>1 | 0<br>6<br>4<br>5 | 0<br>6<br>8<br>2 | 0<br>7<br>2<br>7 | 0<br>5<br>3<br>5 | 0<br>4<br>6<br>5 | 0<br>3<br>8<br>7 | 0<br>6<br>5<br>4 | 0<br>7<br>2<br>6 | 0<br>3<br>2<br>7 | 0<br>6<br>3<br>5 | 0<br>6<br>5<br>6 |           |                    | 0<br>7<br>2<br>9 | 0<br>6<br>4<br>9 |
| Congestion  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Degeneration, Cystic                                |                  | 1                | 2                | 1                |                  |                  |                  | 1                |                  |                  |                  | 1                |                  | 1                | 1                |                  | 1                | 1                | 1                |                  | 1         |                    | 1                |                  |
| Fatty Change  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Hepatodiaphragmatic Nodule                          |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  | X                | X                |                  |                  |                  |           |                    |                  | X                |
| Infiltration Cellular, Mononuclear Cell             |                  |                  | 1                | 2                |                  |                  | 1                | 1                |                  | 2                | 1                | 2                |                  |                  | 1                |                  | 2                | 1                |                  | 2                |           | 1                  | 1                | 1                |
| Infiltration Cellular, Polymorphonuclear            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Inflammation, Chronic Active                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Mixed Cell Focus                                    |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Pigmentation  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Polyarteritis                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Tension Lipidosis                                   |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  | 3                |                  | 2                |                  |                  |                  |                  | 2                |                  |           |                    |                  |                  |
| Vacuolization Cytoplasmic                           |                  |                  |                  |                  | 2                |                  | 2                |                  | 2                |                  | 2                |                  |                  |                  |                  |                  |                  | 2                | 1                |                  |           |                    |                  |                  |
| Bile Duct, Hyperplasia                              |                  |                  | 1                | 1                |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  | 1                |                  | 3                |                  |                  | 2                |           |                    |                  |                  |
| Biliary Tract, Fibrosis                             |                  | 2                | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                | 1                | 2                |                  |                  | 1                |           |                    |                  |                  |
| Hepatocyte, Necrosis                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Oval Cell, Hyperplasia                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2         |                    |                  |                  |
| Mesentery   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Fat, Necrosis                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | +                | +                |                  |           |                    |                  | +                |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                | 4                |                  |           |                    |                  | 4                |
| Pancreas  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +         | +                  | +                | +                |
| Basophilic Focus                                    |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |           |                    |                  |                  |
| Fibrosis  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Infiltration Cellular, Lymphocyte                   |                  |                  | 2                | 3                | 1                | 1                | 2                | 2                | 1                |                  | 2                |                  |                  | 1                | 1                | 3                | 2                | 1                | 2                |                  | 1         | 2                  | 1                | 1                |
| Inflammation, Chronic Active                        |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Lipomatosis   |                  |                  | 4                | 4                |                  |                  | 3                |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |           | 4                  |                  | 2                |
| Pigmentation  | 1                |                  |                  | 2                |                  | 1                | 2                |                  | 2                |                  |                  | 1                |                  | 2                | 1                | 2                | 2                | 1                | 1                |                  | 1         | 1                  | 1                |                  |
| Polyarteritis                                       |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |                  |                  |
| Acinus, Degeneration                                | 1                |                  | 3                | 4                | 1                | 2                | 4                | 4                | 2                |                  | 3                | 4                |                  | 2                | 1                | 4                | 2                | 1                | 4                |                  | 4         | 4                  | 2                | 1                |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | ANIMAL ID          | males<br>(cont...) |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|--------------------|--------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>2<br>6 | 0<br>6<br>6<br>1 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>2 | 0<br>3<br>7<br>3 | 0<br>5<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>3<br>0<br>1 | 0<br>6<br>4<br>5 | 0<br>6<br>8<br>2 | 0<br>7<br>2<br>7 | 0<br>5<br>3<br>5 | 0<br>4<br>6<br>5 | 0<br>3<br>8<br>7 | 0<br>6<br>5<br>4 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>7 | 0<br>3<br>0<br>5 | 0<br>6<br>3<br>8 | 0<br>6<br>5<br>6 | 0<br>7<br>2<br>9 | 0<br>6<br>4<br>9 | 0<br>7<br>2<br>9      |                    |                    |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0<br>0<br>8<br>1<br>1 | males<br>(cont...) |                    |

|  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |  |  |   |   |   |  |   |
|--|---|---|---|--|---|---|---|---|---|---|---|--|---|---|---|---|---|--|--|---|---|---|--|---|
| Stomach, Forestomach<br>Cyst Epithelial Inclusion<br>Epithelium, Hyperplasia | + | + | + |  | + | + | + | + | + | + | + |  | + | + | + | + | + |  |  | A | + | + |  | + |
| Stomach, Glandular   | + | + | + |  | + | + | + | + | + | + | + |  | + | + | + | + | + |  |  | A | + | + |  | + |
| Tongue   |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |  |  |   |   |   |  |   |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel<br>Mineralization<br>Intima, Proliferation  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Heart<br>Cardiomyopathy<br>Fibrosis<br>Inflammation, Chronic Active<br>Metaplasia, Osseous<br>Thrombosis<br>Endocardium, Hyperplasia<br>Myocardium, Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|  | 1 | 2 | 3 | 2 | 2 | 1 | 1 | 2 |   |   | 3 | 3 | 2 |   | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 2 | 2 | 3 |
|  |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex<br>Angiectasis<br>Degeneration, Cystic<br>Hyperplasia<br>Hypertrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
|   | 0<br>3<br>1<br>2      | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>1      | 0<br>7<br>2<br>8      | 0<br>5<br>4<br>2      | 0<br>3<br>7<br>3      | 0<br>5<br>0<br>2      | 0<br>7<br>0<br>0      | 0<br>3<br>0<br>1      | 0<br>6<br>4<br>5      | 0<br>6<br>2<br>2      | 0<br>7<br>3<br>5      | 0<br>4<br>6<br>5      | 0<br>3<br>8<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>6<br>4      | 0<br>7<br>2<br>7      | 0<br>3<br>0<br>5      | 0<br>6<br>3<br>8      | 0<br>6<br>5<br>6      | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>9      | 0<br>7<br>2<br>9      |                       |                    |
| ANIMAL ID   | 0<br>0<br>8<br>1<br>1 | 0<br>0<br>8<br>1<br>2 | 0<br>0<br>8<br>2<br>1 | 0<br>0<br>8<br>3<br>2 | 0<br>0<br>8<br>3<br>1 | 0<br>0<br>8<br>4<br>2 | 0<br>0<br>8<br>4<br>1 | 0<br>0<br>8<br>5<br>2 | 0<br>0<br>8<br>5<br>1 | 0<br>0<br>8<br>6<br>2 | 0<br>0<br>8<br>6<br>1 | 0<br>2<br>9<br>7<br>2 | 0<br>2<br>9<br>8<br>1 | 0<br>2<br>9<br>8<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>0<br>2 | 0<br>3<br>0<br>1<br>3 | 0<br>3<br>0<br>1<br>2 | 0<br>5<br>1<br>3<br>2 | 0<br>5<br>1<br>3<br>1 | 0<br>5<br>1<br>4<br>2 | 0<br>5<br>1<br>4<br>1 |                    |
| Vacuolization Cytoplasmic                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                  |
| Adrenal Medulla<br>Hyperplasia                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                  |
| Islets, Pancreatic                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | A                  |
| Parathyroid Gland<br>Hyperplasia                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                  |
| Pituitary Gland<br>Angiectasis                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                  |
| Pars Distalis, Cyst                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                  |
| Pars Distalis, Cyst Multilocular                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                  |
| Pars Distalis, Hyperplasia                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 1                |
| Pars Distalis, Hypertrophy                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3 1 2 4            |
| Pars Distalis, Vacuolization Cytoplasmic            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                  |
| Pars Intermedia, Cyst                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                  |
| Rathke's Cleft, Cyst                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                  |
| Thyroid Gland<br>Ultimobranchial Cyst               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                  |
| C-cell, Hyperplasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3 2 1            |
| Follicle, Cyst                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                    |
| Follicular Cell, Hyperplasia                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2 3                |

GENERAL BODY SYSTEM

Peritoneum

+

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID             | males<br>(cont...) |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|--------------------|
|   | 0<br>3<br>1<br>2 | 0<br>7<br>2<br>6 | 0<br>6<br>6<br>1 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>2 | 0<br>3<br>7<br>3 | 0<br>5<br>0<br>2 | 0<br>7<br>0<br>0 | 0<br>3<br>0<br>1 | 0<br>6<br>4<br>5 | 0<br>6<br>8<br>2 | 0<br>7<br>2<br>7 | 0<br>5<br>3<br>5 | 0<br>4<br>6<br>5 | 0<br>3<br>8<br>7 | 0<br>6<br>5<br>1 | 0<br>4<br>6<br>4 | 0<br>7<br>2<br>7 | 0<br>3<br>0<br>5 | 0<br>6<br>3<br>8 | 0<br>6<br>5<br>6 | 0<br>7<br>2<br>9 | 0<br>6<br>4<br>9 | 0<br>7<br>2<br>9 |                       |                    |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0<br>0<br>8<br>1<br>1 |                    |
|   | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0<br>0<br>8<br>1<br>1 |                    |

Tissue NOS  
Cyst  
Mineralization

GENITAL SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------------|
| Coagulating Gland<br>Atrophy<br>Fibrosis<br>Inflammation, Suppurative                                   | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                       |
| Epididymis<br>Exfoliated Germ Cell<br>Hypospermia<br>Infiltration Cellular, Lymphocyte<br>Polyarteritis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 1<br>4<br>1<br>1<br>2 |
| Fat Pad, Epididymal<br>Necrosis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                       |
| Preputial Gland<br>Atrophy<br>Hyperkeratosis<br>Inflammation, Suppurative<br>Duct, Dilatation           |   | + |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   | + | + |   | + | 4<br>4<br>3<br>4<br>4 |
| Prostate, Dorsal/lateral Lobe<br>Atrophy<br>Cyst, Mucinous<br>Fibrosis                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 4<br>2<br>2           |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>3<br>1<br>2      | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>1      | 0<br>7<br>2<br>8      | 0<br>5<br>4<br>2      | 0<br>3<br>7<br>3      | 0<br>5<br>0<br>2      | 0<br>7<br>0<br>0      | 0<br>3<br>0<br>1      | 0<br>6<br>4<br>5      | 0<br>6<br>8<br>2      | 0<br>7<br>2<br>7      | 0<br>5<br>3<br>5      | 0<br>4<br>6<br>5      | 0<br>3<br>8<br>1      | 0<br>6<br>4<br>4      | 0<br>7<br>2<br>7      | 0<br>3<br>0<br>5      | 0<br>6<br>3<br>8      | 0<br>6<br>5<br>6      |                       | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>9      | 0<br>7<br>2<br>9      |                       |                       |
| ANIMAL ID  | 0<br>0<br>8<br>1<br>1 | 0<br>0<br>8<br>1<br>2 | 0<br>0<br>8<br>2<br>1 | 0<br>0<br>8<br>3<br>2 | 0<br>0<br>8<br>4<br>1 | 0<br>0<br>8<br>5<br>3 | 0<br>0<br>8<br>6<br>4 | 0<br>0<br>8<br>7<br>2 | 0<br>0<br>8<br>8<br>5 | 0<br>0<br>8<br>9<br>7 | 0<br>0<br>8<br>9<br>8 | 0<br>2<br>9<br>7<br>1 | 0<br>2<br>9<br>8<br>2 | 0<br>2<br>9<br>8<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>1<br>2 | 0<br>3<br>0<br>1<br>1 | 0<br>3<br>1<br>3<br>2 | 0<br>5<br>1<br>4<br>1 | 0<br>5<br>1<br>3<br>2 | 0<br>5<br>1<br>4<br>1 | 0<br>5<br>1<br>4<br>2 | 0<br>5<br>1<br>4<br>5 | 0<br>5<br>1<br>5<br>1 |
| Infiltration Cellular, Lymphocyte<br>Inflammation, Suppurative   |                       |                       |                       | 1                     | 1                     |                       |                       |                       |                       |                       | 2                     | 1                     |                       |                       | 4                     | 3                     | 1                     |                       | 2                     |                       | 2                     | 2                     | 1                     |                       |                       |                       |
|  | 2                     | 2                     | 1                     | 2                     | 2                     | 1                     | 1                     | 1                     | 1                     | 2                     |                       | 2                     |                       | 1                     | 4                     | 2                     | 3                     | 2                     | 2                     | 1                     | 2                     | 2                     | 2                     | 3                     |                       |                       |
| Prostate, Ventral Lobe<br>Atrophy<br>Fibrosis<br>Infiltration Cellular, Lymphocyte<br>Inflammation, Suppurative<br>Epithelium, Hyperplasia | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 4                     |                       |                       | 2                     |                       | 2                     |                       | 1                     |                       |                       |                       |                       |                       |
|  |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 3                     |                       |                       | 1                     | 4                     |                       | 1                     | 2                     | 1                     | 1                     |                       |                       |                       |                       |                       |                       |                       |
|  |                       |                       |                       | 1                     |                       | 1                     |                       |                       |                       | 3                     |                       |                       | 1                     | 2                     | 4                     |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |
|  |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       | 2                     |                       |                       |                       |                       | 4                     | 3                     |                       |                       |                       |                       |                       | 3                     |                       |                       |
| Seminal Vesicle<br>Atrophy<br>Fibrosis<br>Inflammation, Chronic Active<br>Epithelium, Hyperplasia<br>Lumen, Dilatation                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|  |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       | 2                     |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Testes<br>Polyarteritis<br>Seminiferous Tubule, Degeneration   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|  |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       | 1                     |                       |                       | 3                     |                       |                       |                       | 2                     |                       |
|  | 4                     | 1                     | 1                     | 1                     | 1                     | 1                     | 1                     | 1                     | 1                     |                       | 1                     | 1                     |                       | 1                     | 1                     |                       |                       | 4                     | 1                     | 4                     | 4                     | 2                     |                       |                       | 2                     |                       |

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow<br>Hypocellularity<br>Myeloid Cell, Hyperplasia                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
|   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node<br>Axillary, Hyperplasia, Lymphoid<br>Axillary, Infiltration Cellular, Plasma Cell |   | + |   |   |   |   |   |   |   |   |   | + | + |   |   | + |   |   |   |   | + |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 4 |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 3 |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ANIMAL ID                                  |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>SPRAGUE DAWLEY (NCTR)</b>               | <b>RATS MALE</b> | 1 | 2 | 6 | 6 | 2 | 4 | 7 | 0 | 0 | 3 | 4 | 8 | 2 | 3 | 6 | 8 | 5 | 6 | 2 | 2 | 0 | 3 | 5 | 6 | 2 | 9 | 2 | 4 | 9 | 4 | 9 | 9 | 2 | 4 | 9 | 9 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>F1 25000BPA M</b>                       |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                  | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                  | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                  | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Degeneration, Cystic               |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Hyperplasia, Lymphoid              |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Infiltration Cellular, Plasma Cell |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Inflammation, Suppurative          |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Necrosis                           |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Degeneration, Cystic                |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Hemorrhage                          |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Hyperplasia, Lymphoid               |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Infiltration Cellular, Plasma Cell  |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular                     |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic                       |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                      |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Plasma Cell         |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric                     |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                      |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Polymorphonuclear   |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen                                     |                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Depletion Lymphoid                         |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation           |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                      |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis                                   |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigmentation                               |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polyarteritis                              |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus                                     |                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                    |                  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

males  
(cont...)

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|                                    |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |
|------------------------------------|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |
| F1 25000BPA M                      |  | 3           | 7 | 6 | 7 | 5 | 3 | 5 | 7 | 3 | 6 | 6 | 7 | 5 | 4 | 3 | 6 | 4 | 7 | 7 | 3 |                    | 6 |
| ANIMAL ID                          |  | 1           | 2 | 6 | 2 | 4 | 7 | 0 | 0 | 3 | 4 | 8 | 2 | 3 | 6 | 8 | 5 | 6 | 2 | 2 | 0 | 3                  |   |
|                                    |  | 2           | 6 | 1 | 8 | 2 | 3 | 2 | 0 | 1 | 5 | 2 | 7 | 5 | 5 | 7 | 1 | 4 | 6 | 7 | 5 | 8                  |   |
|                                    |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  |   |
|                                    |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 5                  |   |
|                                    |  | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 1 | 1                  |   |
|                                    |  | 1           | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 1 | 3                  |   |
|                                    |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  |   |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Galactocoele                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Degeneration             |   | 4 |   | 4 |   | 4 | 4 | 4 |   | 3 | 2 | 4 | 3 | 2 |   | 3 |   | 4 | 4 |   | 4 | 2 |
| Alveolus, Dilatation               |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   | 2 |
| Duct, Dilatation                   |   |   |   |   |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   | 3 |
| Skin                               |   |   |   |   | + |   |   | + |   | + |   |   |   | + | + | + | + | + |   |   |   | + |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Edema                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 |   |   |   |   |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |
| Foot, Fibrosis                     |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   | 4 |
| Foot, Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |
| Foot, Inflammation, Chronic Active |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   | 4 |
| Foot, Necrosis                     |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   | 4 |
| Foot, Ulcer                        |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   | 4 |

**MUSCULOSKELETAL SYSTEM**

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males<br>(cont...) |   |   |
|   |             | 3 | 7 | 6 | 7 | 5 | 3 | 5 | 7 | 3 | 6 | 6 | 7 | 5 | 4 | 3 | 6 | 4 | 7 | 7 | 3 | 6 | 6 | 7 |                    | 6 | 7 |
|   |             | 1 | 2 | 6 | 2 | 4 | 7 | 0 | 0 | 3 | 4 | 8 | 2 | 3 | 6 | 8 | 5 | 6 | 2 | 2 | 0 | 3 | 5 | 2 |                    | 4 | 2 |
|   | 2           | 6 | 1 | 8 | 2 | 3 | 2 | 0 | 1 | 5 | 2 | 7 | 5 | 5 | 7 | 1 | 4 | 6 | 7 | 5 | 8 | 6 | 9 | 9 | 9                  | 9 |   |
|   | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 |   |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5                  | 5 |   |
|   |             | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1                  | 1 |   |
|   |             | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 1 | 1 | 3 | 3 | 4                  | 4 |   |
|   |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2                  | 1 |   |

Skeletal Muscle

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression               |   |   | 2 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 3 | 3 |
| Hemorrhage                | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                  | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage                | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Necrosis                  | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventricle, Dilatation     |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 2 | 1 |
| Nerve Trigeminal          | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |
| Peripheral Nerve, Sciatic | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Peripheral Nerve, Tibial  | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord, Cervical     | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord, Lumbar       | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
|   | 0<br>3<br>1<br>2      | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>1      | 0<br>7<br>2<br>8      | 0<br>5<br>4<br>2      | 0<br>3<br>7<br>3      | 0<br>5<br>0<br>2      | 0<br>7<br>0<br>0      | 0<br>3<br>0<br>1      | 0<br>6<br>4<br>5      | 0<br>6<br>8<br>2      | 0<br>7<br>2<br>7      | 0<br>5<br>3<br>5      | 0<br>4<br>6<br>5      | 0<br>3<br>8<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>6<br>4      | 0<br>7<br>2<br>7      | 0<br>3<br>0<br>5      | 0<br>6<br>3<br>8      | 0<br>6<br>5<br>6      | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>9      | 0<br>7<br>2<br>9      |                       |                    |
|   | 0<br>0<br>8<br>1<br>1 | 0<br>0<br>8<br>1<br>2 | 0<br>0<br>8<br>2<br>1 | 0<br>0<br>8<br>3<br>2 | 0<br>0<br>8<br>3<br>1 | 0<br>0<br>8<br>4<br>2 | 0<br>0<br>8<br>4<br>1 | 0<br>0<br>8<br>5<br>2 | 0<br>0<br>8<br>5<br>1 | 0<br>0<br>8<br>7<br>1 | 0<br>2<br>9<br>7<br>1 | 0<br>2<br>9<br>8<br>2 | 0<br>2<br>9<br>8<br>1 | 0<br>2<br>9<br>8<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>1<br>1<br>3 | 0<br>3<br>1<br>3<br>2 | 0<br>5<br>1<br>3<br>1 | 0<br>5<br>1<br>4<br>1 | 0<br>5<br>1<br>4<br>2 | 0<br>5<br>1<br>4<br>5 | 0<br>5<br>1<br>5<br>1 |                    |

Spinal Cord, Thoracic

+ + +

**RESPIRATORY SYSTEM**

|   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|---|
| Lung  | + |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Foreign Body  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | X |   |   |   |
| Hemorrhage  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Infiltration Cellular, Histiocyte                   | 1   | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 | 2 |   |   |
| Inflammation, Suppurative                           |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Inflammation, Granulomatous                         |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Inflammation, Chronic Active                        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Alveolar Epithelium, Hyperplasia                    |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Nose  | + |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |
| Fibrosis  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 |   |   |   |
| Foreign Body  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | X |   |   |   |
| Inflammation, Suppurative                           |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 |   |   |   |
| Inflammation, Chronic Active                        |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 3 |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 3 | 2 |   |   |
| Respiratory Epithelium, Hyperplasia, Goblet Cell    |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 |   |   |   |
| Trachea   | + |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | A | + | + | + |

**SPECIAL SENSES SYSTEM**

Eye  
 Cataract  
 Mineralization

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 0<br>3<br>1<br>2      | 0<br>7<br>2<br>6      | 0<br>6<br>6<br>1      | 0<br>7<br>2<br>8      | 0<br>5<br>4<br>2      | 0<br>3<br>7<br>3      | 0<br>5<br>0<br>2      | 0<br>7<br>0<br>0      | 0<br>3<br>0<br>1      | 0<br>6<br>4<br>5      | 0<br>6<br>8<br>2      | 0<br>7<br>2<br>7      | 0<br>5<br>3<br>5      | 0<br>4<br>6<br>5      | 0<br>3<br>8<br>7      | 0<br>6<br>5<br>4      | 0<br>7<br>2<br>6      | 0<br>7<br>2<br>7      | 0<br>3<br>0<br>5      | 0<br>6<br>3<br>8      | 0<br>6<br>5<br>6      | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>9      | 0<br>7<br>2<br>9      |                       |                       |
|   | 0<br>0<br>8<br>1<br>1 | 0<br>0<br>8<br>1<br>2 | 0<br>0<br>8<br>2<br>1 | 0<br>0<br>8<br>2<br>2 | 0<br>0<br>8<br>3<br>1 | 0<br>0<br>8<br>4<br>2 | 0<br>0<br>8<br>4<br>1 | 0<br>0<br>8<br>5<br>2 | 0<br>0<br>8<br>5<br>1 | 0<br>0<br>8<br>7<br>2 | 0<br>2<br>8<br>7<br>1 | 0<br>2<br>9<br>8<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>2<br>9<br>9<br>1 | 0<br>2<br>9<br>9<br>2 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>0<br>1 | 0<br>3<br>0<br>1<br>2 | 0<br>3<br>0<br>1<br>3 | 0<br>5<br>1<br>3<br>2 | 0<br>5<br>1<br>3<br>4 | 0<br>5<br>1<br>4<br>1 | 0<br>5<br>1<br>4<br>2 | 0<br>5<br>1<br>4<br>5 | 0<br>5<br>1<br>5<br>1 |

Retinal Detachment  
Retina, Degeneration

Zymbal's Gland  
Inflammation, Suppurative  
Duct, Dilatation

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |  |  |
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Casts Protein                            |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |  |  |
| Inflammation, Chronic Active             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |  |  |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Nephropathy                              | 4 | 2 | 3 | 1 |   | 3 | 1 |   | 2 | 4 | 2 |   | 1 | 2 | 3 | 1 | 2 | 2 |   | 1 | 4 | 2 | 3 | 3 |  |  |
| Polycystic Kidney                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Vacuolization Cytoplasmic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Cortex, Cyst                             |   |   |   |   |   |   |   | X | X |   | X | X | X | X |   | X | X |   | X |   |   | X |   | X |  |  |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Pelvis, Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Renal Tubule, Cyst                       |   |   |   |   |   | X |   | X |   | X |   | X |   | X | X |   | X | X | X |   | X | X |   |   |  |  |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 4 |   | 2 |   |   |   |   |   |   |  |  |
| Urinary Bladder                          |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Lumen, Dilatation                        |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | * TOTALS |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------|
|   | 0560        | 0533 | 0726 | 0384 | 0597 | 0550 | 0662 | 0663 | 0772 | 0743 | 0766 | 0664 | 0565 | 0665 | 0573 | 0775 | 0773 | 0588 | 0651 | 0726 |           |          |
|   | 0511        | 0511 | 0511 | 0511 | 0511 | 0711 | 0711 | 0712 | 0712 | 0722 | 0722 | 0722 | 0722 | 0722 | 0900 | 0900 | 0900 | 0900 | 0900 | 0900 |           |          |
|   | 52          | 61   | 62   | 71   | 72   | 91   | 92   | 91   | 02   | 12   | 11   | 12   | 13   | 32   | 31   | 32   | 41   | 42   | 51   | 52   |           |          |

## ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |       |       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|-------|-------|
| Esophagus   | + | + |   | + | + | + | + | + | + |   | + | + | + | + |   | + | + | 35 |       |       |       |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1     |       |       |
| Periesophageal Tissue, Inflammation,<br>Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0 |       |       |
| Periesophageal Tissue, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0 |       |       |
| Intestine Large, Colon                              | + | + |   | + | + | + | + | A | + | + |   | + | + | + | + |   | A | +  | 30    |       |       |
| Fibrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Hyperplasia, Goblet Cell                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Ulcer   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Epithelium, Hyperplasia                             |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |    |       | 1 3.0 |       |
| Intestine Large, Rectum                             |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |    | 2     |       |       |
| Fibrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Hyperplasia, Goblet Cell                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1 4.0 |       |
| Intestine Small, Ileum                              | + | + |   | + | + | + | + | A | + | A |   | + | A | + | + | + |   | A  | +     | 28    |       |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |       | 1 2.0 |
| Epithelium, Hyperplasia                             |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |    |       |       | 1 4.0 |
| Intestine Small, Jejunum                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       | 1     |       |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | +     | 45    |       |
| Angiectasis   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |    | 3     |       | 2 2.5 |
| Basophilic Focus                                    |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   |    |       |       | 4     |
| Clear Cell Focus                                    |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |    |       |       | 8     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |   |     |   |    |     |     |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|---|-----|---|----|-----|-----|
|   | 0560        | 0563 | 0572 | 0573 | 0575 | 0575 | 0576 | 0576 | 0577 | 0577 | 0578 | 0578 | 0579 | 0579 | 0580 | 0580 | 0581 | 0581 | 0582 | 0582 |          |   |     |   |    |     |     |
| ANIMAL ID   | 0511        | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 |          |   |     |   |    |     |     |
| Congestion  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2        | 1 | 2.0 |   |    |     |     |
| Degeneration, Cystic                                |             |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        | 3 | 2   | 1 | 18 | 1.3 |     |
| Fatty Change  |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      | 2        |   | 3.0 |   | 2  | 3.0 |     |
| Hepatodiaphragmatic Nodule                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X        |   | 5   |   | 5  |     |     |
| Infiltration Cellular, Mononuclear Cell             | 1           | 1    | 1    | 1    | 2    | 1    | 2    |      |      | 1    |      |      |      |      |      |      |      |      |      |      | 1        | 2 | 1   | 1 | 1  | 28  | 1.3 |
| Infiltration Cellular, Polymorphonuclear            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 3.0 |   | 1  | 3.0 |     |
| Inflammation, Chronic Active                        |             |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 2.0 |   | 1  | 2.0 |     |
| Mixed Cell Focus                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 1   |   | 1  |     |     |
| Pigmentation  | 2           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 2.0 |   | 1  | 2.0 |     |
| Polyarteritis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 1.0 |   | 1  | 1.0 |     |
| Tension Lipidosis                                   |             |      |      | 4    |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |          |   | 2.7 |   | 7  | 2.7 |     |
| Vacuolization Cytoplasmic                           | 3           | 2    | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4        | 2 | 2.3 |   | 14 | 2.3 |     |
| Bile Duct, Hyperplasia                              |             |      |      |      | 1    |      | 2    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 1.7 |   | 12 | 1.7 |     |
| Biliary Tract, Fibrosis                             |             |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 1.3 |   | 10 | 1.3 |     |
| Hepatocyte, Necrosis                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4 | 4.0 |   | 1  | 4.0 |     |
| Oval Cell, Hyperplasia                              |             |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 1.5 |   | 2  | 1.5 |     |
| Mesentery   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 4   |   | 4  |     |     |
| Fat, Necrosis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4 | 4.0 |   | 4  | 4.0 |     |
| Pancreas  | +           | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |          |   | 44  |   | 44 |     |     |
| Basophilic Focus                                    |             |      |      | X    |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |          |   | 4   |   | 4  |     |     |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 4.0 |   | 1  | 4.0 |     |
| Infiltration Cellular, Lymphocyte                   | 2           | 2    | 1    | 2    | 1    | 2    | 1    | 3    | 1    |      |      |      |      |      |      |      |      |      |      |      | 1        | 2 | 1.7 |   | 36 | 1.7 |     |
| Inflammation, Chronic Active                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 3.0 |   | 2  | 3.0 |     |
| Lipomatosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 3.0 |   | 9  | 3.0 |     |
| Pigmentation  | 1           | 2    |      | 2    |      | 2    | 1    | 2    |      |      |      |      |      |      |      |      |      |      |      |      | 1        | 2 | 1.4 |   | 26 | 1.4 |     |
| Polyarteritis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |   | 3.0 |   | 1  | 3.0 |     |
| Acinus, Degeneration                                | 2           | 3    | 2    | 4    | 1    | 3    |      | 3    | 1    |      |      |      |      |      |      |      |      |      |      |      | 2        | 4 | 2.6 |   | 37 | 2.6 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|   | 0560        | 0563 | 0572 | 0573 | 0575 | 0575 | 0576 | 0576 | 0577 | 0577 | 0578 | 0578 | 0579 | 0579 | 0580 | 0580 | 0581 | 0581 | 0582 | 0582 |          |
| ANIMAL ID   | 0511        | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 |          |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |          |
|   | 5           | 5    | 7    | 3    | 5    | 5    | 6    | 6    | 7    | 4    | 7    | 6    | 6    | 5    | 6    | 5    | 7    | 7    | 5    | 6    |          |
|   | 6           | 3    | 2    | 8    | 9    | 1    | 7    | 0    | 1    | 6    | 2    | 5    | 1    | 3    | 3    | 7    | 2    | 2    | 8    | 5    |          |
|   | 0           | 3    | 6    | 4    | 7    | 0    | 2    | 3    | 2    | 3    | 6    | 7    | 4    | 5    | 5    | 3    | 5    | 7    | 3    | 1    |          |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |          |
|   | 5           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 9    | 9    | 9    | 9    | 9    |          |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    |          |
|   | 5           | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5    |          |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    |          |

|  |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |  |   |   |    |   |     |  |
|--|---|---|--|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|----|---|-----|--|
| Stomach, Forestomach<br>Cyst Epithelial Inclusion<br>Epithelium, Hyperplasia | + | + |  | + | + | + | + | + | + | + |  | + | + | + | + |   |  | + | + | 34 | 1 | 4.0 |  |
| Stomach, Glandular   | + | + |  | + | + | + | + | + | + | A |  | + | + | + | + | + |  | + | + | 33 |   |     |  |
| Tongue   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |  |   |   |    | 1 |     |  |

**CARDIOVASCULAR SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----|-----|
| Blood Vessel<br>Mineralization<br>Intima, Proliferation  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46  | 1   | 1.0 |
| Heart<br>Cardiomyopathy<br>Fibrosis<br>Inflammation, Chronic Active<br>Metaplasia, Osseous<br>Thrombosis<br>Endocardium, Hyperplasia<br>Myocardium, Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46  | 41  | 2.0 |
|  | 3 | 2 | 2 | 1 | 1 | 1 | 4 | 1 | 3 | 2 | 4 |   | 2 | 2 | 1 |   | 4 | 4 |   | 1 | 2.0 | 3.0 | 2.0 |
|  | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2.0 | 1   | 1   |
|  |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   | 1   | 2.0 |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   | 1   | 3.0 |

**ENDOCRINE SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Adrenal Cortex<br>Angiectasis<br>Degeneration, Cystic<br>Hyperplasia<br>Hypertrophy | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 45 | 2   | 3.0 |
|   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 3  | 3.0 |     |
|   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7  | 1.4 |     |
|   |   |   |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 4  | 1.5 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS     |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|
|   | 0560        | 0533 | 0572 | 0538 | 0559 | 0551 | 0567 | 0566 | 0577 | 0542 | 0577 | 0566 | 0555 | 0566 | 0555 | 0577 | 0577 | 0555 | 0566 | 0577 |              |
| ANIMAL ID   | 0511        | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0512 | 0522 | 0522 | 0522 | 0522 | 0522 | 0522 | 0522 | 0523 | 0533 | 0533 | 0533 | 0544 |              |
| Vacuolization Cytoplasmic                           |             | 2    |      |      | 2    |      |      | 4    |      |      |      |      |      |      | 4    | 2    | 2    | 2    | 1    | 1    | 15 2.3       |
| Adrenal Medulla Hyperplasia                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | 45<br>5 1.6  |
| Islets, Pancreatic                                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | 45           |
| Parathyroid Gland Hyperplasia                       | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | 46<br>12 1.9 |
| Pituitary Gland Angiectasis                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | 45<br>6 3.7  |
| Pars Distalis, Cyst                                 |             |      |      |      |      |      |      | 4    |      |      |      | 4    |      |      |      |      |      |      |      | 4    | 2            |
| Pars Distalis, Cyst Multilocular                    |             |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      | 5            |
| Pars Distalis, Hyperplasia                          |             | 2    | 3    | 3    |      |      |      |      | 4    |      |      | 4    | 2    | 4    |      | 2    | 2    |      |      |      | 19 2.4       |
| Pars Distalis, Hypertrophy                          |             |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 1 2.0        |
| Pars Distalis, Vacuolization Cytoplasmic            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 2.0        |
| Pars Intermedia, Cyst                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2            |
| Rathke's Cleft, Cyst                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1            |
| Thyroid Gland Ultimobranchial Cyst                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | 44<br>3      |
| C-cell, Hyperplasia                                 | X           |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      | 2            |
| Follicle, Cyst                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 11 1.8       |
| Follicular Cell, Hyperplasia                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1            |
|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3 2.7        |

GENERAL BODY SYSTEM

Peritoneum

1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |                 |  |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|--|--|
|   | ANIMAL ID   | 5 | 5 | 7 | 3 | 5 | 5 | 6 | 6 | 7 | 4 | 7 | 6 | 6 | 5 | 6 | 5 | 7 | 7 | 5 | 6 | 7 |                 |  |  |
|   | 6           | 3 | 2 | 8 | 9 | 1 | 7 | 0 | 1 | 6 | 2 | 5 | 1 | 3 | 3 | 7 | 2 | 2 | 8 | 5 | 5 | 6 |                 |  |  |
|   | 0           | 3 | 6 | 4 | 7 | 0 | 2 | 3 | 2 | 3 | 6 | 7 | 4 | 5 | 5 | 3 | 5 | 7 | 3 | 1 | 2 | 6 |                 |  |  |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                 |  |  |
|   | 5           | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |                 |  |  |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                 |  |  |
|   | 5           | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 |                 |  |  |
|   | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | <b>* TOTALS</b> |  |  |

|                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |         |  |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|--|
| Tissue NOS     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + 1     |  |
| Cyst           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X 1     |  |
| Mineralization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 1 4.0 |  |

**GENITAL SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45            |  |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 1 4.0       |  |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 1 4.0       |  |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 1 3.0       |  |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46            |  |
| Exfoliated Germ Cell              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3 6 1.7     |  |
| Hypospermia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3 4 4 9 3.9 |  |
| Infiltration Cellular, Lymphocyte | 1 | 1 | 1 |   | 1 | 1 |   |   |   | 1 | 1 |   |   |   |   |   | 1 | 1 |   |   |   |   | 15 1.1        |  |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 1 3.0       |  |
| Fat Pad, Epididymal               | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1             |  |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 1 4.0       |  |
| Preputial Gland                   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9             |  |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1 2.0       |  |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 2 4.0       |  |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3 3.7       |  |
| Duct, Dilatation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4 8 3.4     |  |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46            |  |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 1 4.0       |  |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X 1           |  |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4 3 6 2.8   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |  |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--|
|   | 0560        | 0533 | 0726 | 0384 | 0597 | 0550 | 0662 | 0663 | 0772 | 0413 | 0766 | 0661 | 0535 | 0665 | 0533 | 0775 | 0772 | 0558 | 0661 | 0672 |           |  |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0511      |  |
|   | 5           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 9    | 9    | 9    | 9    | 9    | 9    | 0512      |  |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0513      |  |
|   | 5           | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5    | 0514      |  |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    | 0515      |  |

\* TOTALS

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Infiltration Cellular, Lymphocyte Inflammation, Suppurative | 1 |   | 2 |   | 1 | 2 | 4 |   | 1 |   |   | 1 |   |   |   | 1 |   | 2 |   |   | 20 | 1.8 |     |
|   | 1 | 1 | 3 | 2 | 3 | 3 | 4 | 1 | 2 | 1 | 2 | 4 |   |   | 2 | 2 | 2 | 2 | 1 | 3 | 2  | 41  | 2.0 |
| Prostate, Ventral Lobe Atrophy                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 46  |     |
|   |   |   | 3 |   |   |   | 4 |   |   |   |   | 3 |   |   |   | 3 |   |   |   |   |    | 5   | 3.2 |
| Fibrosis  |   |   | 4 | 3 |   |   | 4 |   |   |   |   |   |   | 2 | 3 |   |   |   |   | 2 |    | 11  | 2.6 |
| Infiltration Cellular, Lymphocyte Inflammation, Suppurative |   |   | 2 | 2 |   | 1 | 4 |   |   |   | 1 |   |   | 1 |   |   |   |   | 1 | 1 |    | 15  | 1.7 |
| Epithelium, Hyperplasia                                     |   |   |   | 2 |   |   | 4 |   |   |   |   | 4 |   |   |   |   |   | 1 |   |   |    | 11  | 2.2 |
|   |   |   |   |   |   | 1 |   |   |   |   |   |   | 4 |   |   |   |   |   | 2 |   |    | 8   | 2.5 |
| Seminal Vesicle Atrophy                                     | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | +  | 43  |     |
|   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |    | 2   | 3.5 |
| Fibrosis  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Inflammation, Chronic Active                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |    | 2   | 2.0 |
| Epithelium, Hyperplasia                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 2.7 |
| Lumen, Dilatation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Testes  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 46  |     |
| Polyarteritis   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 2 |   |   | 4 |   | 1 | 2 |    | 10  | 2.1 |
| Seminiferous Tubule, Degeneration                           |   |   | 4 |   | 1 | 2 | 1 |   |   |   |   |   | 3 | 3 | 4 | 4 | 4 | 1 | 1 | 1 | 1  | 33  | 1.9 |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow Hypocellularity                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |     |
|  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 4  | 3.5 |
| Myeloid Cell, Hyperplasia                    |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 4.0 |
| Lymph Node                                   |   |   |   |   |   |   |   |   |   |   | + | + | + | + |   |   |   |   |   | + |   | 11 |     |
| Axillary, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 3.5 |
| Axillary, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |        |       |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------|-------|
|   | 0560        | 0533 | 0572 | 0538 | 0559 | 0551 | 0567 | 0566 | 0577 | 0544 | 0577 | 0566 | 0555 | 0566 | 0555 | 0577 | 0577 | 0555 | 0566 | 0577 |          |        |       |
| ANIMAL ID   | 0511        | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 | 0511 |          |        |       |
| Lumbar, Degeneration, Cystic                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    | 2 3.5    |        |       |
| Lumbar, Hyperplasia, Lymphoid                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4        | 2 4.0  |       |
| Lumbar, Infiltration Cellular, Plasma Cell          |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      | 4        | 4 4.0  |       |
| Lumbar, Inflammation, Suppurative                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |       |
| Lumbar, Necrosis                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |       |
| Renal, Degeneration, Cystic                         |             |      |      |      |      |      |      |      |      |      |      |      | 4    |      | 4    |      |      |      |      |      |          | 6 3.8  |       |
| Renal, Hemorrhage                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |       |
| Renal, Hyperplasia, Lymphoid                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 3.0  |       |
| Renal, Infiltration Cellular, Plasma Cell           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |          | 2 4.0  |       |
| Lymph Node, Mandibular<br>Degeneration, Cystic      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4      | 1 2.0 |
| Hyperplasia, Lymphoid                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2 3.5  |       |
| Infiltration Cellular, Plasma Cell                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2 4.0  |       |
| Lymph Node, Mesenteric<br>Hyperplasia, Lymphoid     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 3      | 1 3.0 |
| Infiltration Cellular, Polymorphonuclear            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |       |
| Spleen  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |          | 45     |       |
| Depletion Lymphoid                                  |             |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |          | 1 3.0  |       |
| Hematopoietic Cell Proliferation                    |             |      | 2    | 2    |      |      | 2    |      |      |      |      | 2    |      |      |      | 2    |      |      |      | 2    |          | 13 2.1 |       |
| Hyperplasia, Lymphoid                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |          | 1 3.0  |       |
| Necrosis  |             |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |          | 1 4.0  |       |
| Pigmentation  |             |      |      | 2    |      | 2    |      | 2    |      | 2    | 1    |      |      |      |      | 3    |      | 1    | 1    |      | 3        | 24 2.0 |       |
| Polyarteritis                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |          | 1 1.0  |       |
| Thymus  | M           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |          | 43     |       |
| Atrophy   |             | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4        | 42 4.0 |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|                              |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST                  |  | 5 | 5 | 7 | 3 | 5 | 5 | 6 | 6 | 7 | 4 | 7 | 6 | 6 | 5 | 6 | 5 | 7 | 7 | 5 | 6 | 7 |
| <b>SPRAGUE DAWLEY (NCTR)</b> |  | 6 | 3 | 2 | 8 | 9 | 1 | 7 | 0 | 1 | 6 | 2 | 5 | 1 | 3 | 3 | 7 | 2 | 2 | 8 | 5 | 6 |
| <b>RATS MALE</b>             |  | 0 | 3 | 6 | 4 | 7 | 0 | 2 | 3 | 2 | 3 | 6 | 7 | 4 | 5 | 5 | 3 | 5 | 7 | 3 | 1 | 6 |
| <b>F1 25000BPA M</b>         |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                    |  | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 |
|                              |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |  | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 |
|                              |  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |
| <b>* TOTALS</b>              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | <b>45</b>     |
| Galactocoele                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | <b>1</b>      |
| Alveolus, Degeneration             | 3 | 4 |   |   |   | 4 |   |   | 3 | 4 |   | 4 | 3 |   | 3 |   |   |   |   |   |   | <b>23 3.4</b> |
| Alveolus, Dilatation               |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   | 4 |   | 2 | 2 | <b>9 2.2</b>  |
| Duct, Dilatation                   |   |   |   |   | 3 |   | 2 |   |   |   |   |   |   |   | 3 |   | 4 |   | 2 | 2 |   | <b>11 2.5</b> |
| Skin                               |   |   |   |   | + | + | + |   | + | + | + |   |   |   | + |   |   |   | + |   |   | <b>17</b>     |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>      |
| Edema                              |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 3.0</b>  |
| Inflammation, Chronic Active       |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Necrosis                           |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Ulcer                              |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Epithelium, Hyperplasia            |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   |   |   | 3 |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>8 3.9</b>  |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>5 4.0</b>  |
| Foot, Fibrosis                     |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>9 4.0</b>  |
| Foot, Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Foot, Inflammation, Chronic Active |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>9 4.0</b>  |
| Foot, Necrosis                     |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>8 4.0</b>  |
| Foot, Ulcer                        |   |   |   |   |   |   |   | 4 |   | 4 |   | 4 |   |   |   |   |   |   |   | 4 |   | <b>8 4.0</b>  |

**MUSCULOSKELETAL SYSTEM**

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                      |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b> |                  | 5 | 5 | 7 | 3 | 5 | 5 | 6 | 6 | 7 | 4 | 7 | 6 | 6 | 5 | 6 | 5 | 7 | 7 | 5 | 6 | 7 |
|  |                  | 6 | 3 | 2 | 8 | 9 | 1 | 7 | 0 | 1 | 6 | 2 | 5 | 1 | 3 | 3 | 7 | 2 | 2 | 8 | 5 | 6 |
| <b>F1 25000BPA M</b>                             |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | <b>ANIMAL ID</b> | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 |
|  |                  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                  | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 |
|  |                  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                                  |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Skeletal Muscle

+

1

**NERVOUS SYSTEM**

Brain, Brain Stem

+ 46

Compression

2 3 1 8 2.6

Hemorrhage

1 2.0

Necrosis

1 2.0

Brain, Cerebellum

+ 46

Hemorrhage

1 1.0

Brain, Cerebrum

+ 46

Hemorrhage

4 2.0

Necrosis

1 3.0

Ventricle, Dilatation

4 1.8

Nerve Trigeminal

+ + + + + + + + + 8

Axon, Degeneration

5 2.8

Peripheral Nerve, Sciatic

+ + + + + 8

Axon, Degeneration

1 2.0

Peripheral Nerve, Tibial

+ + + + + 8

Spinal Cord, Cervical

+ + + + + 8

Spinal Cord, Lumbar

+ + + + + 8

Axon, Degeneration

5 2.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |                 |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|   | 0560        | 0533 | 0726 | 0384 | 0597 | 0550 | 0662 | 0663 | 0772 | 0413 | 0766 | 0664 | 0565 | 0663 | 0573 | 0775 | 0772 | 0583 | 0651 | 0726 |           |                 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0511      |                 |
|   | 5           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 9    | 9    | 9    | 9    | 9    | 9    | 0515      |                 |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0519      |                 |
|   | 5           | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5    | 0522      |                 |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    |           | <b>* TOTALS</b> |

Spinal Cord, Thoracic

+ + + + + 8

**RESPIRATORY SYSTEM**

|  |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  |        |
|--|-------------------------------------|---|--|---|---|--|--|---|---|---|--|--|--|---|--|--|---|--|--|--|--------|
| Lung   | + + + + + + + + + + + + + + + + + + |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 36     |
| Foreign Body   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 2      |
| Hemorrhage   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 2 3.5  |
| Infiltration Cellular, Histiocyte<br>Inflammation, Suppurative | 1                                   | 1 |  | 1 | 2 |  |  | 4 | 1 | 2 |  |  |  | 1 |  |  | 4 |  |  |  | 17 1.9 |
| Inflammation, Granulomatous                                    | 1                                   |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 3 1.3  |
| Inflammation, Chronic Active                                   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 1 3.0  |
| Alveolar Epithelium, Hyperplasia                               |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 4 4.0  |
| Nose   | + + + + + + + + + + + + + + + + + + |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 35     |
| Fibrosis   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 1 4.0  |
| Foreign Body   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 3      |
| Inflammation, Suppurative                                      |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 4 2.5  |
| Inflammation, Chronic Active                                   |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 1 4.0  |
| Olfactory Epithelium, Accumulation, Hyaline<br>Droplet         |                                     |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 5 2.4  |
| Respiratory Epithelium, Hyperplasia, Goblet<br>Cell            | 2                                   |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 2 2.0  |
| Trachea  | + + + + + + + + A + + + + + + + +   |   |  |   |   |  |  |   |   |   |  |  |  |   |  |  |   |  |  |  | 33     |

**SPECIAL SENSES SYSTEM**

|                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |
|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Eye            | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |
| Cataract       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 4.0 |
| Mineralization |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000BPA M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | ANIMAL ID   | 5 | 5 | 7 | 3 | 5 | 5 | 6 | 6 | 7 | 4 | 7 | 6 | 6 | 5 | 6 | 5 | 7 | 7 | 5 | 6 | 7 |
|   |             | 6 | 3 | 2 | 8 | 9 | 1 | 7 | 0 | 1 | 6 | 2 | 5 | 1 | 3 | 3 | 7 | 2 | 2 | 8 | 5 | 2 |
|   |             | 0 | 3 | 6 | 4 | 7 | 0 | 2 | 3 | 2 | 3 | 6 | 7 | 4 | 5 | 5 | 3 | 5 | 7 | 3 | 1 | 6 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 |
|   |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |       |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|-------|
| Retinal Detachment        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |       |       |
| Retina, Degeneration      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 1 4.0 |       |
| Zymbal's Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | +     | 1     |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4     | 1 4.0 |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4     | 1 4.0 |

URINARY SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     |        |       |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|-----|--------|-------|
| Kidney                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 45 |   |     |        |       |
| Accumulation, Hyaline Droplet            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 4 | 4 4 | 3 4.0  |       |
| Casts Protein                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 1 1.0  |       |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 3 1.0  |       |
| Inflammation, Chronic Active             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 1 3.0  |       |
| Mineralization                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 2      | 1 2.0 |
| Nephropathy                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 3 | 3   | 39 2.3 |       |
| Polycystic Kidney                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 4      | 1 4.0 |
| Vacuolization Cytoplasmic                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 4      | 1 4.0 |
| Cortex, Cyst                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 11     |       |
| Pelvis, Dilatation                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 1      | 2.0   |
| Pelvis, Inflammation, Chronic Active     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 1      | 4.0   |
| Renal Tubule, Cyst                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 11     |       |
| Transitional Epithelium, Hyperplasia     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 3      | 4 2.5 |
| Urinary Bladder                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | +      | 3     |
| Lumen, Dilatation                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     | 4      | 2 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST | 077   | 066   | 055   | 066   | 077   | 077   | 077   | 077   | 033   | 033   | 077   | 055   | 077   | 055   | 055   | 066   | 055   | 077   | 066   | 066   | 077   | 066   | 044   | 077   | 055   | males<br>(cont...) |
|   | ANIMAL ID   | 00971 | 00972 | 00978 | 00981 | 00982 | 00989 | 00991 | 00993 | 00994 | 00995 | 00996 | 00997 | 00998 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 | 00999 |                    |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus   | + | + | + |   | + |   |   |   | + | + |   | + | + | + | + |   | + | + |   | + | + |   | + | + |   |
| Intestine Large, Colon                            | + | A | + |   | + |   |   |   | + | + |   | + | + | + | A |   | + | + |   | + | + |   | + | + |   |
| Intestine Small, Ileum                            | + | A | + |   | + |   |   |   | + | + |   | + | A | + | + | A |   | + | + |   | + | + |   | + | + |
| Intestine Small, Jejunum<br>Hyperplasia, Lymphoid |   |   |   |   |   |   |   |   |   |   |   | + | 2 |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                                       |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   |
| Basophilic Focus                                  |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Clear Cell Focus                                  |   |   |   |   |   | X | X |   |   |   |   |   |   | X | X |   |   | X |   |   |   |   | X | X |   |
| Degeneration, Cystic                              | 2 |   | 1 | 2 |   | 2 | 2 |   |   |   |   | 1 |   |   | 2 |   | 2 |   |   |   |   |   | 1 | 1 |   |
| Hematopoietic Cell Proliferation                  |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule                        |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |
| Infiltration Cellular, Mononuclear Cell           | 2 |   | 1 | 2 | 1 | 1 | 1 | 1 |   | 1 | 1 | 1 | 2 | 1 | 2 | 1 |   | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 |
| Mixed Cell Focus                                  |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                                 |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic                         | 2 |   | 2 | 1 |   |   |   |   | 2 |   |   | 2 | 1 |   |   |   | 2 | 2 |   | 2 |   |   |   | 2 | 1 |
| Bile Duct, Hyperplasia                            | 3 |   | 1 |   | 2 |   | 2 |   |   |   | 1 | 3 |   |   |   |   | 1 |   |   |   |   | 2 | 1 |   | 1 |
| Biliary Tract, Fibrosis                           |   |   |   |   | 1 | 1 |   | 1 |   |   | 2 |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   | 1 |
| Hepatocyte, Necrosis                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Oval Cell, Hyperplasia                            |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesentery   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat, Necrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|
|   | 0727        | 0666 | 0552 | 0608 | 0776 | 0777 | 0777 | 0777 | 0332 | 0332 | 0772 | 0558 | 0772 | 0558 | 0554 | 0667 | 0556 | 0772 | 0668 | 0663 |           |                    | 0772 | 0663 | 0446 | 0772 |
|   | 0097        | 0097 | 0098 | 0098 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099      | 0099               | 0099 | 0099 | 0099 | 0099 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus                  |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 1 |   | 2 | 2 | 2 |   |   |   |   |   | 1 |   | 2 | 1 | 2 | 2 | 2 |   |
| Lipomatosis                       | 4 |   |   |   | 4 |   | 3 |   |   |   | 3 |   |   |   |   |   | 3 |   | 3 |   |   |   |   | 4 |   |
| Pigmentation                      |   |   |   |   | 1 | 2 | 1 |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   |   | 2 |   | 1 |   |
| Acinar Cell, Hyperplasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Acinus, Degeneration              | 4 | 2 | 4 | 3 | 4 | 2 | 3 | 2 |   | 4 | 3 | 3 | 2 |   |   |   |   | 2 | 1 | 2 | 1 | 3 | 3 | 3 | 1 |
| Duct, Dilatation                  |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Forestomach              |   | + | + | + |   | + |   |   |   | + | + |   | + |   | + | + | + | + |   | + | + |   | + | + |   |
| Inflammation, Chronic Active      |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                             |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia           |   |   |   |   |   | 4 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Stomach, Glandular                |   | + | + | + |   | + |   |   |   | + | + |   | + |   | + | + | + | A |   | + | + |   | + | + |   |
| Mineralization                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mineralization |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | 1 | 3 | 3 | 1 | 2 | 1 | 2 | 2 | 1 |   | 4 | 1 | 3 | 1 | 2 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |
| Mineralization |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypertrophy    |   |   | 1 |   |   |   | 2 | 2 |   | 3 |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|
|   | 0727        | 0666 | 0552 | 0608 | 0776 | 0777 | 0777 | 0777 | 0332 | 0332 | 0772 | 0558 | 0772 | 0558 | 0554 | 0672 | 0556 | 0772 | 0668 | 0663 |           |                    | 0772 | 0663 | 0446 | 0772 |
| Metaplasia, Osseous<br>Vacuolization Cytoplasmic    |             | 1    |      |      |      | 2    | 2    | 2    |      |      |      | 4    | 1    |      | 2    |      | 3    |      |      |      | 1         | 2                  |      | 3    |      |      |
| Adrenal Medulla<br>Hyperplasia                      | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    | +    |      |
| Islets, Pancreatic<br>Hyperplasia                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |
| Parathyroid Gland<br>Hyperplasia                    | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    |      |      |
| Pituitary Gland<br>Angiectasis                      |             | 4    |      |      | 3    |      |      |      |      |      | 3    |      | 4    |      | 4    |      | 4    |      |      |      | 3         |                    | 4    |      |      |      |
| Hemorrhage  |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |
| Pars Distalis, Cyst                                 |             |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |           |                    |      |      |      |      |
| Pars Distalis, Hyperplasia                          | 2           |      | 3    |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      | 2         | 1                  |      | 1    | 3    | 3    |
| Pars Distalis, Hypertrophy                          |             |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      | 2         |                    |      |      |      |      |
| Rathke's Cleft, Cyst                                |             |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |
| Thyroid Gland<br>Ultimobranhial Cyst                | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    | +    |      |
| C-cell, Hyperplasia                                 | 1           | 1    |      | 2    | 2    | 2    | 2    |      |      |      |      | 2    |      |      |      |      | 2    |      |      | 2    |           | 2                  | 1    | 1    |      |      |
| Follicle, Cyst                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |           |                    |      |      |      |      |
| Follicular Cell, Hyperplasia                        |             |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |           |                    |      |      |      | 2    |

GENERAL BODY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                    |               | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |      |      |      |      |
|------------------------------------|---------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|------|------|------|------|
|                                    |               | 0727        | 0666 | 0555 | 0666 | 0777 | 0777 | 0777 | 0777 | 0333 | 0333 | 0777 | 0555 | 0777 | 0555 | 0555 | 0666 | 0555 | 0777 | 0666 | 0666 |                    | 0777 | 0666 | 0444 | 0777 | 0555 |
|                                    |               | 7           | 6    | 5    | 0    | 2    | 0    | 3    | 2    | 7    | 7    | 2    | 8    | 2    | 8    | 4    | 7    | 6    | 2    | 8    | 3    |                    | 2    | 3    | 6    | 2    | 7    |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE | ANIMAL ID     | 0097        | 0097 | 0098 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099               | 0099 | 0099 | 0099 | 0099 |      |
|                                    | F1 0.05 EE2 M | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1                  | 2    | 1    | 2    | 1    |      |

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Exfoliated Germ Cell              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hypospermia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Preputial Gland                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Abscess                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Duct, Dilatation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Prostate, Ventral Lobe            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |           | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |       |       |
|---|-----------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|
|   |           | 0727        | 0666  | 0552  | 0608  | 0776  | 0777  | 0777  | 0777  | 0337  | 0337  | 0775  | 0777  | 0558  | 0558  | 0664  | 0667  | 0556  | 0772  | 0668  | 0663  |                    | 0772  | 0663  | 0446  | 0772  | 0557  |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | ANIMAL ID | 00971       | 00972 | 00978 | 00981 | 00982 | 00989 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 | 00993 |                    | 00993 | 00993 | 00993 | 00993 | 00993 |
| Mineralization                                      |           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |
| Epithelium, Hyperplasia                             |           |             |       |       |       |       | 3     |       |       | 2     |       | 3     |       |       |       |       |       |       |       |       | 3     |                    |       |       |       |       |       |
| Seminal Vesicle                                     |           | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +                  | +     | +     | +     | +     |       |
| Atrophy   |           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |                    |       |       |       |       |       |
| Edema   |           |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |
| Lumen, Dilatation                                   |           |             | 2     |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |
| Testes  |           | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     |       |
| Polyarteritis                                       |           |             |       |       | 1     | 2     |       |       |       |       | 3     | 2     |       |       | 2     |       |       |       |       |       |       | 4                  |       |       |       |       |       |
| Seminiferous Tubule, Degeneration                   |           | 2           |       |       | 4     | 1     | 2     | 1     |       | 4     | 3     | 1     | 1     | 4     |       | 1     |       |       | 4     | 1     |       | 2                  | 1     | 1     | 2     |       |       |

HEMATOPOIETIC SYSTEM

|   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                     |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Myeloid Cell, Hyperplasia                       |  |   |   |   |   |   | 4 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |
| Lymph Node                                      |  |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   | + | + |   |   |   |   |   | + |
| Lumbar, Degeneration, Cystic                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 4 |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell      |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |
| Mediastinal, Degeneration, Cystic               |  |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hemorrhage                         |  |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid              |  |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Infiltration Cellular, Plasma Cell |  |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Degeneration, Cystic                     |  |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |
| Renal, Hemorrhage                               |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Renal, Infiltration Cellular, Plasma Cell       |  |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |
| Lymph Node, Mandibular                          |  |   |   |   |   |   |   |   | + | + | + |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |
| Degeneration, Cystic                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|   | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                 |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | 0727        | 0666 | 0552 | 0608 | 0706 | 0777 | 0777 | 0777 | 0322 | 0333 | 0777 | 0555 | 0777 | 0555 | 0555 | 0666 | 0555 | 0777 | 0666 | 0666 | 0777 | 0666 | 0444 | 0777 | 0555 |      |                 |
| ANIMAL ID   | 0097        | 0097 | 0098 | 0082 | 0099 | 0099 | 0099 | 0031 | 0031 | 0031 | 0031 | 0031 | 0031 | 0052 | 0052 | 0053 | 0053 | 0053 | 0053 | 0073 | 0073 | 0077 | 0077 | 0091 | 0091 | 0091 | males (cont...) |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   | 2 |   | 4 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Spleen Hematopoietic Cell Proliferation                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Necrosis   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |
| Pigmentation   | 2 | 1 | 1 |   | 2 | 1 | 2 |   |   | 2 | 2 | 4 | 1 |   |   | 2 |   | 1 |   | 1 | 1 | 3 |   |   |   | 1 |   |   |   |   |
| Thymus Atrophy   | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |   |
|  | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 |   | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Mammary Gland Hyperplasia, Lobular | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |
| Alveolus, Degeneration             |   |   |   |   | 2 | 3 | 4 | 4 |   |   | 2 | 4 | 2 |   | 4 |   | 4 | 4 | 4 |   |   | 4 |   |   |   |   | 4 | 3 |  |   |
| Alveolus, Dilatation               |   | 3 |   | 1 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |  |   |
| Duct, Dilatation                   |   | 3 |   | 2 |   |   |   |   |   |   | 2 | 2 |   |   | 2 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |  |   |
| Skin Cyst Epithelial Inclusion     | + |   |   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + | + |   |  |   |
| Inflammation, Granulomatous        | X |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |  |   |
| Foot, Edema                        |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |  | 4 |
| Foot, Fibrosis                     |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |  | 4 |
| Foot, Inflammation, Chronic Active |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |  | 4 |
| Foot, Necrosis                     |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |  | 4 |
| Foot, Ulcer                        |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |  | 4 |

MUSCULOSKELETAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|   | 0727        | 0666 | 0552 | 0608 | 0776 | 0777 | 0777 | 0777 | 0336 | 0336 | 0776 | 0552 | 0778 | 0552 | 0554 | 0667 | 0556 | 0772 | 0668 | 0663 |           |                    | 0772 | 0663 | 0446 |
|   | 0097        | 0097 | 0098 | 0098 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099      | 0099               | 0099 | 0099 | 0099 |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur<br>Fibrous Osteodystrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|
| Brain, Brain Stem<br>Compression                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |
|  | 3 |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 3 |   | 2 |   | 2 |   |   |   |   |   |   |  | 3 |  |
| Brain, Cerebellum<br>Hemorrhage                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |
|  |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
| Brain, Cerebrum<br>Hemorrhage<br>Ventricle, Dilatation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 2 |   |   |   |   |  |   |  |
| Nerve Trigeminal<br>Axon, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |  | + |  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 2 |  |   |  |
| Peripheral Nerve, Sciatic                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |  | + |  |
| Peripheral Nerve, Tibial                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |  | + |  |
| Spinal Cord, Cervical                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |  | + |  |
| Spinal Cord, Lumbar<br>Axon, Degeneration              |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |  | + |  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 1 |   |   |   |   |   |   |   | 2 |  |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|
|   | 7           | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 3 | 3 | 7 | 5 | 7 | 5 | 5 | 6 | 5 | 7 | 6 | 6 | 7 | 6 | 4 | 7 | 5 | 7 |   |   |           |                    |
|   | 2           | 6 | 5 | 0 | 2 | 0 | 3 | 2 | 7 | 7 | 2 | 8 | 2 | 8 | 4 | 7 | 6 | 2 | 8 | 3 | 2 | 3 | 6 | 2 | 7 | 8 |   |   |           |                    |
|   | 7           | 6 | 2 | 8 | 6 | 7 | 0 | 6 | 0 | 0 | 6 | 2 | 8 | 6 | 4 | 2 | 2 | 7 | 0 | 9 | 6 | 1 | 0 | 6 | 8 |   |   |   |           |                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |           |                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 |   |   |           |                    |
|   | 9           | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 |   |   |           |                    |
|   | 7           | 7 | 8 | 8 | 9 | 9 | 3 | 3 | 4 | 4 | 5 | 5 | 9 | 9 | 0 | 1 | 1 | 1 | 3 | 3 | 4 | 4 | 7 | 7 | 8 |   |   |   |           |                    |
|   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |   |   |           |                    |

Spinal Cord, Thoracic

+ + + +

### RESPIRATORY SYSTEM

|  |                                       |
|--|---------------------------------------|
| Lung   | + + + + + + + + + + + + + + + + + + + |
| Abscess  | 4                                     |
| Congestion   | 4                                     |
| Foreign Body   | X X                                   |
| Hemorrhage   | 4                                     |
| Infiltration Cellular, Histiocyte                      | 1 1 1                                 |
| Inflammation, Granulomatous                            | 1                                     |
| Inflammation, Chronic                                  | 1                                     |
| Inflammation, Chronic Active                           | 4 2                                   |
| Thrombosis   | X                                     |
| Pleura, Fibrosis                                       | 4                                     |
| Nose   | + + + + + + + + + + + + + + + + +     |
| Autolysis  | 4                                     |
| Fibrous Osteodystrophy                                 | 4                                     |
| Hemorrhage   | 4                                     |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    | 2 2                                   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  | 2 3 1                                 |
| Transitional Epithelium, Accumulation, Hyaline Droplet | 3                                     |
| Upper Molar, Inflammation, Suppurative                 | 4                                     |
| Trachea  | + + + + + + + + + + + + + + + + +     |
| Peritracheal Tissue, Hemorrhage                        | 3                                     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |        |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|--------|------|
|   | 0727        | 0666 | 0552 | 0668 | 0776 | 0777 | 0777 | 0777 | 0333 | 0333 | 0777 | 0555 | 0777 | 0555 | 0555 | 0666 | 0555 | 0777 | 0666 | 0666 | 0777 |           |                    | 0666 | 0444 | 0777   | 0555 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 0    | 0    | 009971 |      |

Peritracheal Tissue, Inflammation, Chronic Active

2

**SPECIAL SENSES SYSTEM**

Ear

+

Eye

- Retinal Detachment
- Anterior Chamber, Edema
- Cornea, Bacterium
- Cornea, Edema
- Cornea, Inflammation, Suppurative
- Cornea, Inflammation, Chronic Active
- Cornea, Ulcer
- Retina, Degeneration

+ + +  
 X  
 4  
 X  
 2  
 4  
 4  
 3 4

Zymbal's Gland

+

**URINARY SYSTEM**

Kidney

- Accumulation, Hyaline Droplet
- Casts Protein
- Hemorrhage
- Infiltration Cellular, Polymorphonuclear
- Mineralization
- Nephropathy
- Polycystic Kidney
- Cortex, Cyst

+  
 1  
 4  
 1  
 1  
 4  
 2 2 3 3 2 4 3 3 4 2 4 2 3 4 3 3 2 4 1 3 3  
 X X X X X X X X X X X X X X X X

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M        |  | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males<br>(cont...) |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
|  |  | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
| Renal Tubule, Cyst<br>Transitional Epithelium, Hyperplasia |  |             | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 3 | 3 | 7 | 5 | 7 | 5 | 5 | 6 | 5 | 7 | 6 | 6 | 7 | 6 | 6 | 7 | 5 |                    |
| Urinary Bladder<br>Lumen, Dilatation                       |  |             | 2 | 6 | 5 | 0 | 2 | 0 | 3 | 2 | 7 | 7 | 2 | 8 | 2 | 8 | 4 | 7 | 6 | 2 | 8 | 3 | 2 | 3 | 6 | 3 | 6 |                    |
|  |  |             | 7 | 6 | 2 | 8 | 6 | 7 | 0 | 6 | 0 | 0 | 6 | 2 | 8 | 4 | 2 | 2 | 2 | 7 | 0 | 9 | 6 | 1 | 0 | 6 | 8 |                    |
|  |  |             | 9 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |                    |
|  |  |             | 7 | 7 | 8 | 8 | 9 | 9 | 3 | 3 | 4 | 4 | 5 | 5 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 7 | 7 | 8 |                    |
|  |  |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |                    |
|  |  |             | X | X |   | X | X | X | X | X |   | X | X | X |   | X | X | X |   |   |   |   | X |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |   |                 |
|---|-------------|---|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST | 0 |                 |
|   |             | 4 |                 |
|   |             | 0 |                 |
|   |             | 0 |                 |
|   | ANIMAL ID   | 0 |                 |
|   |             | 9 |                 |
|   |             | 1 |                 |
|   |             | 8 |                 |
|   |             | 2 |                 |
|   |             |   | <b>* TOTALS</b> |

ALIMENTARY SYSTEM

|   |   |    |        |
|---|---|----|--------|
| Esophagus   | + | 17 |        |
| Intestine Large, Colon                            | + | 15 |        |
| Intestine Small, Ileum                            | + | 14 |        |
| Intestine Small, Jejunum<br>Hyperplasia, Lymphoid |   | 1  | 1 2.0  |
| Liver   | + | 26 |        |
| Angiectasis                                       |   |    | 2 2.0  |
| Basophilic Focus                                  |   |    | 3      |
| Clear Cell Focus                                  |   |    | 7      |
| Degeneration, Cystic                              |   |    | 10 1.6 |
| Hematopoietic Cell Proliferation                  |   |    | 1 1.0  |
| Hepatodiaphragmatic Nodule                        |   |    | 3      |
| Infiltration Cellular, Mononuclear Cell           |   |    | 22 1.3 |
| Mixed Cell Focus                                  |   |    | 1      |
| Tension Lipidosis                                 |   |    | 1 3.0  |
| Vacuolization Cytoplasmic                         |   |    | 11 1.7 |
| Bile Duct, Hyperplasia                            |   |    | 10 1.7 |
| Biliary Tract, Fibrosis                           |   |    | 7 1.1  |
| Hepatocyte, Necrosis                              |   |    | 1 1.0  |
| Oval Cell, Hyperplasia                            |   |    | 1 1.0  |
| Mesentery   |   | 1  |        |
| Fat, Necrosis                                     |   |    | 1 4.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.05 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 4 |                 |
|  |             | 0 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 1 |                 |
|  |             | 8 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                                   |   |  |           |        |
|-----------------------------------|---|--|-----------|--------|
| Pancreas                          | + |  | <b>26</b> |        |
| Basophilic Focus                  |   |  |           | 1      |
| Infiltration Cellular, Lymphocyte |   |  |           | 18 1.8 |
| Lipomatosis                       |   |  |           | 7 3.4  |
| Pigmentation                      | 1 |  |           | 8 1.3  |
| Acinar Cell, Hyperplasia          |   |  |           | 1 4.0  |
| Acinus, Degeneration              |   |  |           | 20 2.6 |
| Duct, Dilatation                  |   |  |           | 1 2.0  |

|                              |   |  |           |       |
|------------------------------|---|--|-----------|-------|
| Stomach, Forestomach         | + |  | <b>17</b> |       |
| Inflammation, Chronic Active |   |  |           | 1 3.0 |
| Ulcer                        |   |  |           | 1 1.0 |
| Epithelium, Hyperplasia      |   |  |           | 2 3.0 |

|                    |   |  |           |       |
|--------------------|---|--|-----------|-------|
| Stomach, Glandular | + |  | <b>16</b> |       |
| Mineralization     |   |  |           | 1 3.0 |

**CARDIOVASCULAR SYSTEM**

|                |   |  |           |       |
|----------------|---|--|-----------|-------|
| Blood Vessel   | + |  | <b>26</b> |       |
| Mineralization |   |  |           | 2 3.5 |

|                |   |  |           |        |
|----------------|---|--|-----------|--------|
| Heart          | + |  | <b>26</b> |        |
| Cardiomyopathy |   |  |           | 24 1.8 |
| Mineralization |   |  |           | 2 3.5  |

**ENDOCRINE SYSTEM**

|                |   |  |           |       |
|----------------|---|--|-----------|-------|
| Adrenal Cortex | + |  | <b>26</b> |       |
| Hypertrophy    |   |  |           | 7 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M |   | DAY ON TEST | ANIMAL ID | * TOTALS |
|---|---|-------------|-----------|----------|
|   |   | 0           |           |          |
|   |   | 4           |           |          |
|   |   | 0           |           |          |
|   |   | 0           |           |          |
|   |   | 0           |           |          |
|   |   | 0           |           |          |
|   |   | 9           |           |          |
|   |   | 1           |           |          |
|   |   | 8           |           |          |
|   |   | 2           |           |          |
| Metaplasia, Osseous                                 |   |             |           | 1 3.0    |
| Vacuolization Cytoplasmic                           |   |             |           | 10 2.0   |
| Adrenal Medulla                                     | + |             |           | 26       |
| Hyperplasia   |   |             |           | 5 2.2    |
| Islets, Pancreatic                                  | + |             |           | 26       |
| Hyperplasia   |   |             |           | 1 2.0    |
| Parathyroid Gland                                   | + |             |           | 25       |
| Hyperplasia   |   |             |           | 7 2.1    |
| Pituitary Gland                                     | + |             |           | 26       |
| Angiectasis   |   |             |           | 7 3.6    |
| Hemorrhage  |   |             |           | 1 4.0    |
| Pars Distalis, Cyst                                 |   |             |           | 2        |
| Pars Distalis, Hyperplasia                          | 2 |             |           | 10 2.2   |
| Pars Distalis, Hypertrophy                          |   |             |           | 2 1.5    |
| Rathke's Cleft, Cyst                                |   |             |           | 1        |
| Thyroid Gland                                       | + |             |           | 25       |
| Ultimobranchial Cyst                                |   |             |           | 1        |
| C-cell, Hyperplasia                                 |   |             |           | 12 1.7   |
| Follicle, Cyst                                      |   |             |           | 1        |
| Follicular Cell, Hyperplasia                        |   |             |           | 2 3.0    |

GENERAL BODY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |             |   |                 |
|---|-------------|---|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST | 0 |                 |
|   |             | 4 |                 |
|   |             | 0 |                 |
|   |             | 0 |                 |
|   | ANIMAL ID   | 0 |                 |
|   |             | 9 |                 |
|   |             | 1 |                 |
|   |             | 8 |                 |
|   |             | 2 |                 |
|   |             |   | <b>* TOTALS</b> |

**GENITAL SYSTEM**

|                                   |   |    |        |
|-----------------------------------|---|----|--------|
| Coagulating Gland                 | + | 26 |        |
| Fibrosis                          |   |    | 1 4.0  |
| Inflammation, Chronic Active      |   |    | 1 2.0  |
| Lumen, Dilatation                 |   |    | 1 2.0  |
| Epididymis                        | + | 26 |        |
| Exfoliated Germ Cell              |   |    | 6 1.5  |
| Hypospermia                       |   |    | 5 3.8  |
| Infiltration Cellular, Lymphocyte |   |    | 5 1.2  |
| Preputial Gland                   |   | 4  |        |
| Abscess                           |   |    | 1 4.0  |
| Hyperkeratosis                    |   |    | 1 4.0  |
| Inflammation, Suppurative         |   |    | 2 4.0  |
| Duct, Dilatation                  |   |    | 3 3.7  |
| Prostate, Dorsal/lateral Lobe     | + | 26 |        |
| Cyst, Mucinous                    |   |    | 1      |
| Fibrosis                          |   |    | 2 3.0  |
| Infiltration Cellular, Lymphocyte |   |    | 17 1.5 |
| Inflammation, Suppurative         | 2 |    | 26 1.8 |
| Prostate, Ventral Lobe            | + | 26 |        |
| Atrophy                           |   |    | 2 2.0  |
| Fibrosis                          |   |    | 2 3.0  |
| Infiltration Cellular, Lymphocyte |   |    | 6 1.3  |
| Inflammation, Suppurative         |   |    | 4 1.8  |
| Inflammation, Chronic Active      |   |    | 1 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST           |           |          |
|---|-----------------------|-----------|----------|
|   | 0<br>4<br>0<br>0      | ANIMAL ID | * TOTALS |
|   | 0<br>9<br>1<br>8<br>2 |           |          |

|                         |  |   |     |
|-------------------------|--|---|-----|
| Mineralization          |  | 1 | 3.0 |
| Epithelium, Hyperplasia |  | 4 | 3.0 |

|                   |   |    |     |
|-------------------|---|----|-----|
| Seminal Vesicle   | + | 25 |     |
| Atrophy           |   | 1  | 3.0 |
| Edema             |   | 1  | 4.0 |
| Lumen, Dilatation |   | 2  | 2.5 |

|                                   |   |    |     |
|-----------------------------------|---|----|-----|
| Testes                            | + | 26 |     |
| Polyarteritis                     |   | 6  | 2.3 |
| Seminiferous Tubule, Degeneration |   | 17 | 2.1 |

**HEMATOPOIETIC SYSTEM**

|                           |   |    |     |
|---------------------------|---|----|-----|
| Bone Marrow               | + | 26 |     |
| Myeloid Cell, Hyperplasia |   | 3  | 3.7 |

|   |   |   |     |
|---|---|---|-----|
| Lymph Node                                      | + | 7 |     |
| Lumbar, Degeneration, Cystic                    |   | 2 | 3.0 |
| Lumbar, Infiltration Cellular, Plasma Cell      |   | 2 | 4.0 |
| Mediastinal, Degeneration, Cystic               |   | 1 | 4.0 |
| Mediastinal, Hemorrhage                         |   | 1 | 4.0 |
| Mediastinal, Hyperplasia, Lymphoid              |   | 1 | 3.0 |
| Mediastinal, Infiltration Cellular, Plasma Cell |   | 1 | 4.0 |
| Renal, Degeneration, Cystic                     |   | 2 | 3.5 |
| Renal, Hemorrhage                               |   | 1 | 3.0 |
| Renal, Infiltration Cellular, Plasma Cell       |   | 3 | 3.3 |

|                        |   |   |     |
|------------------------|---|---|-----|
| Lymph Node, Mandibular | + | 6 |     |
| Degeneration, Cystic   |   | 1 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.05 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 4 |                 |
|  |             | 0 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 1 |                 |
|  |             | 8 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                                    |  |   |     |
|------------------------------------|--|---|-----|
| Hyperplasia, Lymphoid              |  | 3 | 3.7 |
| Infiltration Cellular, Plasma Cell |  | 4 | 3.5 |

|                                  |   |    |     |
|----------------------------------|---|----|-----|
| Spleen                           | + | 26 |     |
| Hematopoietic Cell Proliferation |   | 6  | 2.0 |
| Necrosis                         |   | 1  | 4.0 |
| Pigmentation                     |   | 16 | 1.7 |

|         |   |    |     |
|---------|---|----|-----|
| Thymus  | + | 24 |     |
| Atrophy |   | 22 | 3.9 |

**INTEGUMENTARY SYSTEM**

|                        |   |    |     |
|------------------------|---|----|-----|
| Mammary Gland          | + | 25 |     |
| Hyperplasia, Lobular   | 2 | 2  | 2.0 |
| Alveolus, Degeneration |   | 14 | 3.5 |
| Alveolus, Dilatation   |   | 4  | 2.3 |
| Duct, Dilatation       |   | 6  | 2.3 |

|                                    |  |   |     |
|------------------------------------|--|---|-----|
| Skin                               |  | 6 |     |
| Cyst Epithelial Inclusion          |  | 3 |     |
| Inflammation, Granulomatous        |  | 1 | 4.0 |
| Epithelium, Foot, Hyperplasia      |  | 3 | 4.0 |
| Foot, Edema                        |  | 4 | 3.5 |
| Foot, Fibrosis                     |  | 4 | 4.0 |
| Foot, Inflammation, Chronic Active |  | 4 | 4.0 |
| Foot, Necrosis                     |  | 4 | 4.0 |
| Foot, Ulcer                        |  | 4 | 4.0 |

**MUSCULOSKELETAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M |   | DAY ON TEST |                 |       |
|---|---|-------------|-----------------|-------|
|   |   | ANIMAL ID   |                 |       |
|   |   | 0           |                 |       |
|   |   | 4           |                 |       |
|   |   | 0           |                 |       |
|   |   | 0           |                 |       |
|   |   | 0           |                 |       |
|   |   | 9           |                 |       |
|   |   | 1           |                 |       |
|   |   | 8           |                 |       |
|   |   | 2           |                 |       |
|   |   |             | <b>* TOTALS</b> |       |
| Bone  |   |             | 1               |       |
| Bone, Femur   | + |             | 26              |       |
| Fibrous Osteodystrophy                              | 4 |             |                 | 1 4.0 |
| Skeletal Muscle                                     |   |             | 2               |       |
| <b>NERVOUS SYSTEM</b>                               |   |             |                 |       |
| Brain, Brain Stem                                   | + |             | 26              |       |
| Compression   |   |             |                 | 6 2.7 |
| Brain, Cerebellum                                   | + |             | 26              |       |
| Hemorrhage  |   |             |                 | 1 2.0 |
| Brain, Cerebrum                                     | + |             | 26              |       |
| Hemorrhage  |   |             |                 | 1 1.0 |
| Ventricle, Dilatation                               |   |             |                 | 2 2.0 |
| Nerve Trigeminal                                    |   |             | 4               |       |
| Axon, Degeneration                                  |   |             |                 | 2 1.5 |
| Peripheral Nerve, Sciatic                           |   |             | 4               |       |
| Peripheral Nerve, Tibial                            |   |             | 4               |       |
| Spinal Cord, Cervical                               |   |             | 4               |       |
| Spinal Cord, Lumbar                                 |   |             | 4               |       |
| Axon, Degeneration                                  |   |             |                 | 3 1.7 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.05 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 4 |                 |
|  |             | 0 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 1 |                 |
|  |             | 8 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

Spinal Cord, Thoracic

4

**RESPIRATORY SYSTEM**

|  |   |  |    |     |
|--|---|--|----|-----|
| Lung   | + |  | 19 |     |
| Abscess  |   |  | 1  | 4.0 |
| Congestion   |   |  | 1  | 4.0 |
| Foreign Body   |   |  | 2  |     |
| Hemorrhage   |   |  | 1  | 4.0 |
| Infiltration Cellular, Histiocyte                      |   |  | 4  | 1.0 |
| Inflammation, Granulomatous                            |   |  | 1  | 1.0 |
| Inflammation, Chronic                                  |   |  | 1  | 1.0 |
| Inflammation, Chronic Active                           |   |  | 2  | 3.0 |
| Thrombosis   |   |  | 1  |     |
| Pleura, Fibrosis                                       |   |  | 1  | 4.0 |
| Nose   | + |  | 17 |     |
| Autolysis  |   |  | 1  | 4.0 |
| Fibrous Osteodystrophy                                 | 4 |  | 1  | 4.0 |
| Hemorrhage   |   |  | 1  | 4.0 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |   |  | 3  | 2.7 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |   |  | 3  | 2.0 |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |  | 1  | 3.0 |
| Upper Molar, Inflammation, Suppurative                 |   |  | 1  | 4.0 |
| Trachea  | + |  | 17 |     |
| Peritracheal Tissue, Hemorrhage                        |   |  | 1  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |   |                 |
|---|-------------|---|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M | DAY ON TEST | 0 |                 |
|   |             | 4 |                 |
|   |             | 0 |                 |
|   |             | 0 |                 |
|   | ANIMAL ID   | 0 |                 |
|   |             | 9 |                 |
|   |             | 1 |                 |
|   |             | 8 |                 |
|   |             | 2 |                 |
|   |             |   | <b>* TOTALS</b> |

Peritracheal Tissue, Inflammation, Chronic Active

1 2.0

SPECIAL SENSES SYSTEM

Ear

1

Eye

3

Retinal Detachment

1

Anterior Chamber, Edema

1 4.0

Cornea, Bacterium

1

Cornea, Edema

1 2.0

Cornea, Inflammation, Suppurative

1 4.0

Cornea, Inflammation, Chronic Active

1 4.0

Cornea, Ulcer

1 4.0

Retina, Degeneration

2 3.5

Zymbal's Gland

1

URINARY SYSTEM

Kidney

+

26

Accumulation, Hyaline Droplet

4

1 4.0

Casts Protein

1 1.0

Hemorrhage

1 4.0

Infiltration Cellular, Polymorphonuclear

2 1.0

Mineralization

1 4.0

Nephropathy

21 2.9

Polycystic Kidney

1 4.0

Cortex, Cyst

11

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.05 EE2 M |  | DAY ON TEST |  |                 |
|---|--|-------------|--|-----------------|
|   |  | ANIMAL ID   |  |                 |
|   |  | 0           |  |                 |
|   |  | 4           |  |                 |
|   |  | 0           |  |                 |
|   |  | 0           |  |                 |
|   |  | 0           |  |                 |
|   |  | 0           |  |                 |
|   |  | 9           |  |                 |
|   |  | 1           |  |                 |
|   |  | 8           |  |                 |
|   |  | 2           |  |                 |
|   |  |             |  | <b>* TOTALS</b> |
| Renal Tubule, Cyst                                  |  |             |  | <b>14</b>       |
| Transitional Epithelium, Hyperplasia                |  |             |  | <b>2 1.5</b>    |
| Urinary Bladder                                     |  |             |  | <b>1</b>        |
| Lumen, Dilatation                                   |  |             |  | <b>1 4.0</b>    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST | 0591  | 07271 | 04726 | 07727 | 05759 | 04744 | 07755 | 05712 | 07414 | 07728 | 07799 | 07799 | 07799 | 06707 | 07225 | 07228 | 07228 | 06704 | 06609 | 07228 | 07727 | 04763 | males<br>(cont...) |
|   | ANIMAL ID   | 01091 | 01190 | 01100 | 01101 | 01101 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 | 01322 |                    |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + |   | + | + |   | + | + | + |   |   |   |   | + | + |   |   |   |   | + | + | + |   | + |   |
| Intestine Large, Colon                  | + |   | A |   |   | + | + |   |   | A | + | + |   |   | + | + |   |   |   |   | + | + | + |   | A |
| Intestine Small, Ileum                  | + |   | A |   |   | + | + |   |   | A | + | + |   |   | + | + |   |   |   |   | A | + | + |   | A |
| Liver                                   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis                             |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                        |   |   |   |   |   |   |   | X |   |   |   |   | X | X |   | X | X | X |   | X |   | X | X |   |   |
| Degeneration, Cystic                    | 2 |   |   | 2 |   |   |   | 1 |   | 1 |   | 2 |   | 2 |   | 1 | 1 |   |   | 1 | 1 |   |   |   |   |
| Fatty Change                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Infiltration Cellular, Mononuclear Cell |   | 1 |   | 2 | 1 | 1 | 1 | 1 | 1 | 2 |   | 1 |   | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic               |   | 2 |   | 3 | 1 |   |   |   |   |   |   |   | 2 | 2 | 1 | 2 | 2 |   | 1 | 2 |   |   | 1 | 2 |   |
| Bile Duct, Hyperplasia                  |   |   |   |   | 1 |   |   |   | 1 | 1 |   |   |   | 2 |   | 1 |   | 3 | 3 |   |   |   |   | 1 |   |
| Biliary Tract, Cyst Multilocular        |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
| Biliary Tract, Fibrosis                 |   |   |   |   | 1 |   |   |   |   | 1 |   | 1 |   | 2 |   | 1 |   | 1 |   |   |   | 1 | 1 |   |   |
| Oval Cell, Hyperplasia                  |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesentery                               |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat, Necrosis                           |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                                | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Basophilic Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte       | 2 |   |   | 3 | 2 | 1 | 1 | 1 |   | 3 |   |   | 1 | 2 | 2 | 2 | 2 | 1 | 2 |   |   |   | 1 |   |   |
| Inflammation, Chronic Active            |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

|  |           | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | males<br>(cont...) |        |        |   |  |   |
|--|-----------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|--------|--------|---|--|---|
|  |           | 0591        | 0727   | 0472   | 0772   | 0751   | 0441   | 0722   | 0552   | 0715   | 0472   | 0779   | 0777   | 0779   | 0767   | 0772   | 0722   | 0772   | 0664   | 0669   | 0728   |                    | 0778   | 0473   |   |  |   |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M                          | ANIMAL ID | 010091      | 011009 | 011001 | 011001 | 011001 | 013002 | 013002 | 013002 | 013003 | 013003 | 013005 | 015005 | 015005 | 015005 | 015005 | 015005 | 017004 | 017004 | 017004 | 017004 |                    | 017004 | 019002 |   |  |   |
| Lipomatosis  |           |             | 3      |        | 3      |        |        |        |        |        | 4      | 3      |        |        |        | 2      |        |        | 3      |        | 3      |                    |        |        |   |  |   |
| Pigmentation   |           | 2           | 1      |        | 2      | 1      | 2      | 1      | 1      |        | 2      |        | 1      | 1      | 1      | 1      |        |        |        |        | 1      |                    |        |        |   |  |   |
| Acinar Cell, Hyperplasia<br>Acinus, Degeneration                             |           | 3           | 4      |        | 4      | 3      | 2      | 2      | 4      |        | 4      |        | 4      | 3      | 3      | 3      | 2      | 3      | 1      | 4      | 2      | 4                  |        | 1      | 2 |  |   |
| Stomach, Forestomach<br>Cyst Epithelial Inclusion<br>Epithelium, Hyperplasia |           | +           |        | A      |        |        | +      | +      |        | +      | +      | +      |        |        |        | +      | +      | +      |        |        | X      |                    | +      |        | + |  |   |
| Stomach, Glandular<br>Inflammation, Chronic Active<br>Necrosis<br>Ulcer      |           | +           |        | A      |        |        | +      | +      |        | A      | +      | +      |        |        |        | +      | +      |        |        |        |        |                    | +      | +      | + |  | + |

**CARDIOVASCULAR SYSTEM**

|                     |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel        |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart               |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy      |  | 1 | 4 | 4 | 4 | 4 | 1 | 2 | 3 | 2 | 2 |   | 3 | 2 | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 4 |   |
| Metaplasia, Osseous |  |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Thrombosis          |  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ENDOCRINE SYSTEM**

|   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex  |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule<br>Degeneration, Cystic |  |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
| Hyperplasia   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 2 | 3 | 1 | 1 |   |   |   |   |   |
| Hypertrophy   |  |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|---|
|   | 5           | 7 | 4 | 7 | 7 | 5 | 4 | 7 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 4 |           |                    |   |
|   | 9           | 2 | 7 | 2 | 2 | 1 | 1 | 2 | 5 | 1 | 7 | 2 | 2 | 2 | 0 | 4 | 2 | 2 | 2 | 7 | 7 | 0 | 2 | 2 | 6         | 1                  | 3 |
|   | 1           | 7 | 1 | 6 | 7 | 9 | 4 | 5 | 2 | 1 | 4 | 8 | 9 | 9 | 7 | 0 | 6 | 5 | 8 | 8 | 4 | 9 | 8 | 7 | 3         |                    |   |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1         |                    |   |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 9 | 9 | 2         | 9                  |   |
|   | 0           | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 9         | 2                  |   |
|   | 9           | 9 | 0 | 0 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | 7 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 2 | 5 | 1         | 6                  |   |
|   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         | 1                  |   |
| Vacuolization Cytoplasmic                           |             | 2 |   | 1 |   |   |   |   |   |   |   |   |   | 2 |   | 2 | 2 | 2 |   |   | 3 | 2 | 1 | 2 | 2         |                    |   |
| Adrenal Medulla<br>Hyperplasia                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |           | +                  |   |
| Islets, Pancreatic                                  |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |           | +                  |   |
| Parathyroid Gland<br>Hyperplasia                    |             | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3         | 4                  |   |
| Pituitary Gland<br>Angiectasis                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |           | 4                  |   |
| Inflammation, Chronic                               |             |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                    |   |
| Thrombosis  |             |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                    |   |
| Pars Distalis, Cyst                                 |             |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   | X |   |   |   |   |   |           |                    |   |
| Pars Distalis, Hyperplasia                          |             | 1 | 2 | 2 |   |   | 1 | 2 |   |   | 2 |   | 1 | 3 |   |   |   | 3 | 2 |   |   | 3 |   | 2 | 2         |                    |   |
| Pars Distalis, Hypertrophy                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 2 |   |   |           |                    |   |
| Pars Intermedia, Hyperplasia                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |           |                    |   |
| Thyroid Gland<br>Ultimobranchial Cyst               |             | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |           |                    |   |
| C-cell, Hyperplasia                                 |             | 3 | 1 |   |   |   |   | 1 |   |   |   |   | X |   | 1 |   |   | 1 |   |   |   |   | X | X |           |                    |   |
| Follicular Cell, Hyperplasia                        |             |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 3 |   |   |   |   | 3 |   |   |           |                    |   |

**GENERAL BODY SYSTEM**

|            |   |
|------------|---|
| Tissue NOS | + |
| Hemorrhage | 4 |
| Thrombosis | X |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST | 0591  | 0727  | 0471  | 0772  | 0579  | 0444  | 0775  | 0522  | 0751  | 0474  | 0778  | 0579  | 0779  | 0670  | 0722  | 0728  | 0674  | 0669  | 0728  | 0727  | 0476  | 0770  | 0728  | 0772  | 0473  | males<br>(cont...) |
|   | ANIMAL ID   | 01091 | 01101 | 01111 | 01121 | 01131 | 01141 | 01151 | 01161 | 01171 | 01181 | 01191 | 01201 | 01211 | 01221 | 01231 | 01241 | 01251 | 01261 | 01271 | 01281 | 01291 | 01301 | 01311 | 01321 | 01331 |                    |

GENITAL SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland Atrophy                    | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ductus Deferens Granuloma Sperm              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis Exfoliated Germ Cell              | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 |   |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Hypospermia                                  |   |   |   | 4 | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   |   | 4 | 4 |   | 4 | 4 | 4 |   |   |   |
| Infiltration Cellular, Lymphocyte            | 1 |   |   | 2 | 1 |   |   |   |   | 2 |   | 1 | 1 |   |   |   | 1 | 1 |   |   | 1 |   |   | 1 |   | 1 |
| Preputial Gland Abscess                      |   |   |   | + | + |   | + |   |   |   |   |   |   |   |   | + |   |   |   | + | + |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |
| Inflammation, Suppurative                    |   |   |   | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |
| Duct, Dilatation                             |   |   |   | 4 | 3 |   | 4 |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |
| Prostate, Dorsal/lateral Lobe Cyst, Mucinous | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   | 3 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte            |   |   |   |   |   | 1 | 2 | 1 |   | 2 |   | 4 |   | 2 | 2 | 1 | 1 |   | 1 | 2 | 1 |   |   |   | 2 |   |
| Inflammation, Suppurative                    |   |   |   | 1 |   | 1 | 2 | 2 | 1 | 3 | 2 | 4 |   | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 2 |
| Prostate, Ventral Lobe Fibrosis              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 2 |   |   |   |   | 2 |   |   |   |   |   | 4 |   | 2 |   |   |   | 2 | 2 |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte            | 2 |   |   |   |   | 2 | 1 |   | 1 |   | 4 |   | 2 | 1 | 1 |   | 2 | 2 |   | 2 |   |   | 1 |   | 2 | 1 |
| Inflammation, Suppurative                    |   |   |   |   |   | 2 | 1 | 1 |   |   | 4 |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | males<br>(cont...) |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--------------------|-------|-------|-------|
|   | 0591        | 07271 | 04726 | 07727 | 05759 | 04744 | 07725 | 05752 | 07741 | 04728 | 07799 | 05770 | 04764 | 07725 | 05778 | 04778 | 07774 | 06770 | 07728 | 06798 |           |                    | 07727 | 04776 | 05799 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0         | 0                  | 0     | 00091 |       |
|   | 1           | 1     | 1     | 1     | 1     | 1     | 3     | 3     | 3     | 3     | 3     | 5     | 5     | 5     | 5     | 5     | 7     | 7     | 7     | 7     | 7         | 9                  | 9     | 00092 |       |
|   | 0           | 0     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4         | 4                  | 5     | 00093 |       |
|   | 9           | 9     | 0     | 0     | 1     | 1     | 5     | 5     | 6     | 6     | 7     | 7     | 1     | 1     | 2     | 2     | 3     | 3     | 1     | 1     | 2         | 2                  | 5     | 00094 |       |
|   | 1           | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1         | 2                  | 1     | 00095 |       |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inflammation, Chronic Active Mineralization Epithelium, Hyperplasia | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |
| Seminal Vesicle Atrophy Epithelium, Hyperplasia Lumen, Dilatation   | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |   |
| Testes Polyarteritis Seminiferous Tubule, Degeneration              | 3 | 3 |   | 4 | 4 | 1 |   | 1 | 1 | 4 |   | 2 | 4 | 1 |   | 1 | 1 | 1 | 4 | 4 | 1 | 4 | 4 | 4 |   |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow Hypocellularity Myeloid Cell, Hyperplasia  | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Lymph Node Lumbar, Degeneration, Cystic Lumbar, Hyperplasia, Lymphoid Lumbar, Infiltration Cellular, Plasma Cell Renal, Degeneration, Cystic Renal, Hemorrhage |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular Degeneration, Cystic Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   |   |   | 3 | + | + |   |   | 4 |   | + | + |   |   | 4 | 4 |   |   | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| DAY ON TEST                                |                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |                      | 5 | 7 | 4 | 7 | 7 | 5 | 4 | 7 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 4 | 4 |   |
|  | <b>F1 0.50 EE2 M</b> | 9 | 2 | 7 | 2 | 2 | 1 | 1 | 2 | 5 | 1 | 7 | 2 | 2 | 2 | 0 | 4 | 2 | 2 | 2 | 7 | 0 | 2 | 2 | 6 | 6 |   |
| ANIMAL ID                                  |                      | 1 | 7 | 1 | 6 | 7 | 9 | 4 | 5 | 2 | 1 | 4 | 8 | 9 | 9 | 7 | 0 | 6 | 5 | 8 | 4 | 9 | 8 | 7 | 7 | 3 |   |
|  |                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                      | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 9 | 9 | 9 |   |
|  |                      | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 |   |
|  |                      | 9 | 9 | 0 | 0 | 1 | 1 | 5 | 6 | 6 | 7 | 7 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 5 | 5 | 6 |   |
|  |                      | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |

males  
(cont...)

Lymph Node, Mesenteric

+

Spleen

Hematopoietic Cell Proliferation  
Hyperplasia, Lymphoid  
Pigmentation  
Vacuolization Cytoplasmic

+ + A +  
3 2 1 2 2 2 2 2 2 2 2 1 1 2 2 1  
1 2 2 4 1 2 3 2 2 2 2 2 2 2 1 1 2 2 1

Thymus

Atrophy

+ M +  
4 4 3 4 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

INTEGUMENTARY SYSTEM

Mammary Gland

Galactocele  
Inflammation, Granulomatous  
Alveolus, Degeneration  
Alveolus, Dilatation  
Duct, Dilatation

+ + A +  
X  
3 4 4 3 4 4 3 4 4 3 4 3 4 3 4 2 4 4 2  
2 2

Skin

Cyst Epithelial Inclusion  
Epithelium, Foot, Hyperplasia  
Foot, Fibrosis  
Foot, Inflammation, Chronic Active  
Foot, Necrosis  
Foot, Ulcer

+  
X X 4  
4 4

MUSCULOSKELETAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |
|---|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | ANIMAL ID | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |   |
|   |           | 5           | 7 | 4 | 7 | 7 | 5 | 4 | 7 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 |                    | 4 | 4 |
|   |           | 9           | 2 | 7 | 2 | 2 | 1 | 1 | 2 | 5 | 1 | 7 | 2 | 2 | 2 | 0 | 4 | 2 | 2 | 2 | 8 | 7 | 0 | 2 | 2                  | 6 | 3 |
|   |           | 1           | 7 | 1 | 6 | 7 | 9 | 4 | 5 | 2 | 1 | 4 | 8 | 9 | 9 | 7 | 0 | 6 | 5 | 8 | 4 | 9 | 8 | 7 | 3                  |   |   |
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  |   |   |
|   |           | 1           | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 9 | 9 | 9                  |   |   |
|   |           | 0           | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2                  |   |   |
|   |           | 9           | 9 | 0 | 0 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 5 | 5 | 6                  |   |   |
|   |           | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1                  |   |   |

Bone Tarsal, Hyperostosis + 4

Bone, Femur +

**NERVOUS SYSTEM**

Brain, Brain Stem Compression 3 3 2 4  
 Gliosis 2  
 Necrosis 2

Brain, Cerebellum +

Brain, Cerebrum Ventricle, Dilatation 2 2 2 1

Nerve Trigeminal Axon, Degeneration 1 A 1 1

Peripheral Nerve, Sciatic + A + +

Peripheral Nerve, Tibial + A + +

Spinal Cord, Cervical + A + +

Spinal Cord, Lumbar Axon, Degeneration 2 A + 2

Spinal Cord, Thoracic + A + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 0.50 EE2 M</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  | ANIMAL ID   | 5 | 7 | 4 | 7 | 7 | 5 | 4 | 7 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | 7 | 4 |
|  |             | 9 | 2 | 7 | 2 | 2 | 1 | 1 | 2 | 5 | 1 | 7 | 2 | 2 | 2 | 0 | 4 | 2 | 2 | 2 | 2 | 7 | 0 | 2 | 2 | 7 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 6 |
|  |             | 1 | 7 | 1 | 6 | 7 | 9 | 4 | 5 | 2 | 1 | 4 | 8 | 9 | 9 | 7 | 0 | 6 | 5 | 8 | 8 | 4 | 9 | 8 | 8 | 9 | 9 | 8 | 7 | 7 | 7 | 7 | 7 | 4 | 3 | 3 |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|  |             | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   |
|  |             | 9 | 9 | 0 | 0 | 1 | 1 | 5 | 6 | 6 | 7 | 7 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   |
|  |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |

**males**  
**(cont...)**

**RESPIRATORY SYSTEM**

|   |   |   |  |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
|---|---|---|--|--|---|---|---|---|---|---|---|---|--|---|---|---|---|--|--|---|---|---|---|--|--|--|--|--|--|--|--|--|--|---|--|---|---|
| Lung  | + | A |  |  | + | + |   |   |   | + | + |   |  | + | + |   |   |  |  | + | + | + |   |  |  |  |  |  |  |  |  |  |  | + |  |   |   |
| Congestion  |   |   |  |  |   |   |   |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   | 4 |
| Infiltration Cellular, Histiocyte                     | 4 |   |  |  |   |   |   | 2 |   | 3 | 2 |   |  |   | 1 |   |   |  |  |   | 2 | 1 |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Alveolar Epithelium, Hyperplasia                      | 4 |   |  |  |   |   |   | 3 |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Nose  | + | A |  |  | + | + |   |   |   | + | + | + |  |   | + | + |   |  |  |   | A | + | + |  |  |  |  |  |  |  |  |  |  |   |  | + |   |
| Autolysis   |   |   |  |  |   |   |   |   | 4 |   |   |   |  |   |   |   |   |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Inflammation, Suppurative                             |   |   |  |  |   |   |   |   |   |   |   |   |  |   |   |   | 2 |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 |   |  |  |   |   |   |   |   |   | 2 |   |  |   | 3 | 4 |   |  |  |   |   | 4 | 2 |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 2 |   |  |  |   |   | 2 |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   | 2 |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Respiratory Epithelium, Hyperplasia                   |   |   |  |  |   |   | 2 |   |   |   |   |   |  |   |   |   |   |  |  |   |   |   |   |  |  |  |  |  |  |  |  |  |  |   |  |   |   |
| Trachea   | + | A |  |  | + | + |   |   |   | + | + | + |  |   | + | + |   |  |  |   | A | + | + |  |  |  |  |  |  |  |  |  |  |   |  | + |   |

**SPECIAL SENSES SYSTEM**

|                |  |  |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|----------------|--|--|--|--|---|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Eye            |  |  |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Rupture        |  |  |  |  | + |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Zymbal's Gland |  |  |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |

**URINARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M |  | DAY ON TEST | 0591   | 07271  | 0476   | 0779   | 0549   | 0475   | 0752   | 0571   | 0748   | 0779   | 0779   | 0779   | 0670   | 0722   | 0722   | 0677   | 0667   | 0708   | 0728   | 0778   | 0778   | 0499   | 0728   | 0727   | 0463   | ANIMAL ID | males<br>(cont...) |
|---|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------------------|
|   |  |             | 011091 | 011000 | 011000 | 011000 | 033333 | 033333 | 033333 | 033333 | 055555 | 055555 | 055555 | 055555 | 055555 | 077777 | 077777 | 077777 | 077777 | 077777 | 099999 | 099999 | 099999 | 022222 | 022222 | 022222 | 022222 |           |                    |
| Nephropathy   |  |             | 4      | 1      |        | 4      | 3      | 1      | 3      | 2      | 1      | 3      |        |        | 4      | 2      | 2      | 2      | 3      | 3      | 2      | 3      | 2      | 4      | 4      | 2      | 2      |           |                    |
| Cortex, Cyst  |  |             |        | X      |        |        |        |        |        |        | X      |        |        | X      |        |        |        | X      | X      | X      |        | X      |        |        |        |        |        |           |                    |
| Renal Tubule, Cyst                                  |  |             | X      |        |        |        |        |        |        | X      |        |        |        | X      | X      | X      |        | X      |        |        |        |        |        | X      | X      | X      |        |           |                    |
| Transitional Epithelium, Hyperplasia                |  |             |        |        |        |        |        |        |        |        |        | 3      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.50 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 5 |                 |
|  |             | 6 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 6 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

**ALIMENTARY SYSTEM**

|   |   |   |  |               |
|---|---|---|--|---------------|
| Esophagus                               | + |   |  | <b>14</b>     |
| Intestine Large, Colon                  | + |   |  | <b>11</b>     |
| Intestine Small, Ileum                  | + |   |  | <b>10</b>     |
| Liver                                   | + |   |  | <b>25</b>     |
| Angiectasis                             |   | 4 |  | <b>2 3.0</b>  |
| Clear Cell Focus                        |   |   |  | <b>9</b>      |
| Degeneration, Cystic                    |   |   |  | <b>10 1.4</b> |
| Fatty Change                            |   | 4 |  | <b>1 4.0</b>  |
| Hepatodiaphragmatic Nodule              |   |   |  | <b>1</b>      |
| Infiltration Cellular, Mononuclear Cell |   | 2 |  | <b>20 1.4</b> |
| Mixed Cell Focus                        |   |   |  | <b>1</b>      |
| Tension Lipidosis                       |   |   |  | <b>2 2.5</b>  |
| Vacuolization Cytoplasmic               |   |   |  | <b>12 1.8</b> |
| Bile Duct, Hyperplasia                  |   |   |  | <b>8 1.6</b>  |
| Biliary Tract, Cyst Multilocular        |   |   |  | <b>1</b>      |
| Biliary Tract, Fibrosis                 |   |   |  | <b>8 1.1</b>  |
| Oval Cell, Hyperplasia                  |   |   |  | <b>1 3.0</b>  |
| Mesentery                               |   |   |  | <b>1</b>      |
| Fat, Necrosis                           |   |   |  | <b>1 4.0</b>  |
| Pancreas                                | + |   |  | <b>25</b>     |
| Basophilic Focus                        |   |   |  | <b>1</b>      |
| Infiltration Cellular, Lymphocyte       |   | 2 |  | <b>16 1.8</b> |
| Inflammation, Chronic Active            |   |   |  | <b>2 2.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST |  |                 |
|---|-------------|--|-----------------|
|   | ANIMAL ID   |  |                 |
|   | 0           |  |                 |
|   | 5           |  |                 |
|   | 6           |  |                 |
|   | 0           |  |                 |
|   | 0           |  |                 |
|   | 9           |  |                 |
|   | 2           |  |                 |
|   | 6           |  |                 |
|   | 2           |  |                 |
|   |             |  | <b>* TOTALS</b> |
| Lipomatosis   |             |  | <b>7 3.0</b>    |
| Pigmentation  | 1           |  | <b>15 1.3</b>   |
| Acinar Cell, Hyperplasia                            |             |  | <b>1 3.0</b>    |
| Acinus, Degeneration                                | 3           |  | <b>21 2.9</b>   |
| Stomach, Forestomach                                | +           |  | <b>15</b>       |
| Cyst Epithelial Inclusion                           |             |  | <b>1</b>        |
| Epithelium, Hyperplasia                             |             |  | <b>1 4.0</b>    |
| Stomach, Glandular                                  | +           |  | <b>12</b>       |
| Inflammation, Chronic Active                        |             |  | <b>1 4.0</b>    |
| Necrosis  |             |  | <b>1 4.0</b>    |
| Ulcer   |             |  | <b>1 4.0</b>    |
| <b>CARDIOVASCULAR SYSTEM</b>                        |             |  |                 |
| Blood Vessel  | +           |  | <b>26</b>       |
| Heart   | +           |  | <b>26</b>       |
| Cardiomyopathy                                      | 2           |  | <b>24 2.4</b>   |
| Metaplasia, Osseous                                 |             |  | <b>2 3.0</b>    |
| Thrombosis  |             |  | <b>1</b>        |
| <b>ENDOCRINE SYSTEM</b>                             |             |  |                 |
| Adrenal Cortex                                      | +           |  | <b>26</b>       |
| Accessory Adrenal Cortical Nodule                   |             |  | <b>1</b>        |
| Degeneration, Cystic                                |             |  | <b>1 4.0</b>    |
| Hyperplasia   |             |  | <b>5 1.6</b>    |
| Hypertrophy   |             |  | <b>2 2.0</b>    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M | DAY ON TEST |  |                 |
|---|-------------|--|-----------------|
|   | ANIMAL ID   |  |                 |
|   | 0           |  |                 |
|   | 5           |  |                 |
|   | 6           |  |                 |
|   | 0           |  |                 |
|   | 0           |  |                 |
|   | 9           |  |                 |
|   | 2           |  |                 |
|   | 6           |  |                 |
|   | 2           |  |                 |
|   |             |  | <b>* TOTALS</b> |
| Vacuolization Cytoplasmic                           |             |  | <b>11 1.9</b>   |
| Adrenal Medulla                                     | +           |  | <b>26</b>       |
| Hyperplasia   | 1           |  | <b>6 1.3</b>    |
| Islets, Pancreatic                                  | +           |  | <b>26</b>       |
| Parathyroid Gland                                   | +           |  | <b>25</b>       |
| Hyperplasia   | 1           |  | <b>11 2.2</b>   |
| Pituitary Gland                                     | +           |  | <b>26</b>       |
| Angiectasis   | 4           |  | <b>3 4.0</b>    |
| Inflammation, Chronic                               |             |  | <b>1 4.0</b>    |
| Thrombosis  |             |  | <b>1</b>        |
| Pars Distalis, Cyst                                 |             |  | <b>4</b>        |
| Pars Distalis, Hyperplasia                          |             |  | <b>13 2.0</b>   |
| Pars Distalis, Hypertrophy                          |             |  | <b>2 2.0</b>    |
| Pars Intermedia, Hyperplasia                        |             |  | <b>1 3.0</b>    |
| Thyroid Gland                                       | +           |  | <b>25</b>       |
| Ultimobranchial Cyst                                |             |  | <b>3</b>        |
| C-cell, Hyperplasia                                 |             |  | <b>7 1.4</b>    |
| Follicular Cell, Hyperplasia                        |             |  | <b>3 2.7</b>    |

**GENERAL BODY SYSTEM**

|            |  |  |              |
|------------|--|--|--------------|
| Tissue NOS |  |  | <b>1</b>     |
| Hemorrhage |  |  | <b>1 4.0</b> |
| Thrombosis |  |  | <b>1</b>     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.50 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 5 |                 |
|  |             | 6 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 6 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

**GENITAL SYSTEM**

|                                   |   |  |    |       |
|-----------------------------------|---|--|----|-------|
| Coagulating Gland                 |   |  |    |       |
| Atrophy                           | + |  | 25 | 1 3.0 |
| Ductus Deferens                   |   |  | 1  |       |
| Granuloma Sperm                   |   |  | 1  | 4.0   |
| Epididymis                        |   |  | 26 |       |
| Exfoliated Germ Cell              | + |  | 4  | 1.3   |
| Hypospermia                       | 4 |  | 10 | 4.0   |
| Infiltration Cellular, Lymphocyte |   |  | 10 | 1.2   |
| Preputial Gland                   |   |  | 6  |       |
| Abscess                           |   |  | 1  | 4.0   |
| Fibrosis                          |   |  | 1  | 4.0   |
| Hyperkeratosis                    |   |  | 1  | 4.0   |
| Inflammation, Suppurative         |   |  | 5  | 4.0   |
| Duct, Dilatation                  |   |  | 6  | 3.8   |
| Prostate, Dorsal/lateral Lobe     |   |  | 25 |       |
| Cyst, Mucinous                    | + |  | 1  |       |
| Fibrosis                          |   |  | 2  | 3.5   |
| Infiltration Cellular, Lymphocyte |   |  | 13 | 1.7   |
| Inflammation, Suppurative         | 2 |  | 22 | 2.0   |
| Prostate, Ventral Lobe            |   |  | 26 |       |
| Fibrosis                          | + |  | 6  | 2.3   |
| Infiltration Cellular, Lymphocyte |   |  | 14 | 1.7   |
| Inflammation, Suppurative         | 1 |  | 8  | 1.6   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.50 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 5 |                 |
|  |             | 6 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 6 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                              |  |   |     |
|------------------------------|--|---|-----|
| Inflammation, Chronic Active |  | 1 | 2.0 |
| Mineralization               |  | 3 | 3.0 |
| Epithelium, Hyperplasia      |  | 7 | 2.1 |

|                         |   |    |       |
|-------------------------|---|----|-------|
| Seminal Vesicle         | + | 23 |       |
| Atrophy                 |   |    | 1 4.0 |
| Epithelium, Hyperplasia | 2 |    | 2 2.5 |
| Lumen, Dilatation       |   |    | 1 4.0 |

|                                   |   |    |        |
|-----------------------------------|---|----|--------|
| Testes                            | + | 26 |        |
| Polyarteritis                     |   |    | 5 2.2  |
| Seminiferous Tubule, Degeneration | 4 |    | 21 2.6 |

**HEMATOPOIETIC SYSTEM**

|                           |   |    |       |
|---------------------------|---|----|-------|
| Bone Marrow               | + | 25 |       |
| Hypocellularity           |   |    | 1 3.0 |
| Myeloid Cell, Hyperplasia |   |    | 2 3.5 |

|  |   |   |       |
|--|---|---|-------|
| Lymph Node                                 | + | 6 |       |
| Lumbar, Degeneration, Cystic               |   |   | 3 3.3 |
| Lumbar, Hyperplasia, Lymphoid              |   |   | 1 3.0 |
| Lumbar, Infiltration Cellular, Plasma Cell |   |   | 1 4.0 |
| Renal, Degeneration, Cystic                | 3 |   | 3 3.7 |
| Renal, Hemorrhage                          |   |   | 1 4.0 |

|                                    |  |   |       |
|------------------------------------|--|---|-------|
| Lymph Node, Mandibular             |  | 7 |       |
| Degeneration, Cystic               |  |   | 3 2.7 |
| Hyperplasia, Lymphoid              |  |   | 5 3.4 |
| Infiltration Cellular, Plasma Cell |  |   | 6 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |           | DAY ON TEST |                 |        |
|--|-----------|-------------|-----------------|--------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 0.50 EE2 M</b> |           | 0           |                 |        |
|  |           | 5           |                 |        |
|  |           | 6           |                 |        |
|  |           | 0           |                 |        |
|  | ANIMAL ID | 0           |                 |        |
|  |           | 9           |                 |        |
|  |           | 2           |                 |        |
|  |           | 6           |                 |        |
|  |           | 2           |                 |        |
|  |           |             | <b>* TOTALS</b> |        |
| Lymph Node, Mesenteric   |           |             | 1               |        |
| Spleen   | +         |             | 25              |        |
| Hematopoietic Cell Proliferation   |           |             |                 | 7 1.7  |
| Hyperplasia, Lymphoid  |           |             |                 | 1 2.0  |
| Pigmentation   |           |             |                 | 16 1.8 |
| Vacuolization Cytoplasmic  |           |             |                 | 1 3.0  |
| Thymus   | +         |             | 25              |        |
| Atrophy  |           | 4           |                 | 24 3.9 |
| <b>INTEGUMENTARY SYSTEM</b>  |           |             |                 |        |
| Mammary Gland  | +         |             | 25              |        |
| Galactocele  |           |             |                 | 1      |
| Inflammation, Granulomatous  |           |             |                 | 1 3.0  |
| Alveolus, Degeneration   | 4         |             |                 | 17 3.5 |
| Alveolus, Dilatation   |           |             |                 | 1 2.0  |
| Duct, Dilatation   |           |             |                 | 2 2.0  |
| Skin   |           |             | 7               |        |
| Cyst Epithelial Inclusion  |           |             |                 | 2      |
| Epithelium, Foot, Hyperplasia  |           |             |                 | 1 4.0  |
| Foot, Fibrosis   |           |             |                 | 2 4.0  |
| Foot, Inflammation, Chronic Active                                       |           |             |                 | 2 4.0  |
| Foot, Necrosis   |           |             |                 | 1 4.0  |
| Foot, Ulcer  |           |             |                 | 1 4.0  |

**MUSCULOSKELETAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 0.50 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 5 |                 |
|  |             | 6 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 6 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                      |   |  |              |
|----------------------|---|--|--------------|
| Bone                 |   |  | <b>1</b>     |
| Tarsal, Hyperostosis |   |  | <b>1 4.0</b> |
| Bone, Femur          | + |  | <b>26</b>    |

**NERVOUS SYSTEM**

|                           |   |   |              |
|---------------------------|---|---|--------------|
| Brain, Brain Stem         | + |   | <b>26</b>    |
| Compression               |   | 2 | <b>4 3.0</b> |
| Gliosis                   |   |   | <b>1 2.0</b> |
| Necrosis                  |   |   | <b>1 2.0</b> |
| Brain, Cerebellum         | + |   | <b>26</b>    |
| Brain, Cerebrum           | + |   | <b>26</b>    |
| Ventricle, Dilatation     |   |   | <b>4 1.8</b> |
| Nerve Trigeminal          |   |   | <b>3</b>     |
| Axon, Degeneration        |   |   | <b>3 1.0</b> |
| Peripheral Nerve, Sciatic |   |   | <b>3</b>     |
| Peripheral Nerve, Tibial  |   |   | <b>3</b>     |
| Spinal Cord, Cervical     |   |   | <b>3</b>     |
| Spinal Cord, Lumbar       |   |   | <b>3</b>     |
| Axon, Degeneration        |   |   | <b>2 2.0</b> |
| Spinal Cord, Thoracic     |   |   | <b>3</b>     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 0.50 EE2 M</b> | DAY ON TEST | 0 |                 |
|  |             | 5 |                 |
|  |             | 6 |                 |
|  |             | 0 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 6 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

### RESPIRATORY SYSTEM

|   |   |  |           |              |
|---|---|--|-----------|--------------|
| Lung  | + |  | <b>13</b> |              |
| Congestion  |   |  |           | <b>1 4.0</b> |
| Infiltration Cellular, Histiocyte                     |   |  |           | <b>7 2.1</b> |
| Alveolar Epithelium, Hyperplasia                      |   |  |           | <b>2 3.5</b> |
| Nose  | + |  | <b>12</b> |              |
| Autolysis   |   |  |           | <b>1 4.0</b> |
| Inflammation, Suppurative                             |   |  |           | <b>1 2.0</b> |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |  |           | <b>6 2.8</b> |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |  |           | <b>3 2.0</b> |
| Respiratory Epithelium, Hyperplasia                   |   |  |           | <b>1 2.0</b> |
| Trachea   | + |  | <b>12</b> |              |

### SPECIAL SENSES SYSTEM

|                |  |  |          |          |
|----------------|--|--|----------|----------|
| Eye            |  |  | <b>2</b> |          |
| Rupture        |  |  |          | <b>1</b> |
| Zymbal's Gland |  |  | <b>1</b> |          |

### URINARY SYSTEM

|  |   |  |           |              |
|--|---|--|-----------|--------------|
| Kidney                                   | + |  | <b>26</b> |              |
| Infiltration Cellular, Polymorphonuclear |   |  |           | <b>5 1.4</b> |
| Mineralization                           |   |  |           | <b>1 1.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 0.50 EE2 M |  | DAY ON TEST | ANIMAL ID | * TOTALS |
|---|--|-------------|-----------|----------|
|   |  | 0           |           |          |
|   |  | 5           |           |          |
|   |  | 6           |           |          |
|   |  | 0           |           |          |
|   |  | 0           |           |          |
|   |  | 9           |           |          |
|   |  | 2           |           |          |
|   |  | 6           |           |          |
|   |  | 2           |           |          |
| Nephropathy   |  | 3           |           | 23 2.6   |
| Cortex, Cyst  |  | X           |           | 8        |
| Renal Tubule, Cyst                                  |  |             |           | 10       |
| Transitional Epithelium, Hyperplasia                |  |             |           | 1 3.0    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

|  |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   | 0 | 0 | 0 | 0 | 0 |
|  |           | 6           | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 5 | 6 | 6 | 7 | 6 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 6 | 6 | 7 | 6 |   |
|  |           | 7           | 7 | 2 | 2 | 2 | 9 | 2 | 1 | 5 | 4 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 5 | 7 | 0 | 0 | 9 | 6 | 2 | 9 |   |
|  | ANIMAL ID | 6           | 6 | 7 | 7 | 7 | 8 | 7 | 1 | 5 | 7 | 2 | 7 | 4 | 9 | 8 | 8 | 9 | 6 | 5 | 6 | 0 | 0 | 8 | 4 | 6 |   |
|  | 0         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |
|  | 1         | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 |   |   |
|  | 2         | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |   |   |   |
|  | 1         | 1           | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |
|  | 1         | 2           | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |   |   |   |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Esophagus                                | + | + |   |   |   |   | + |   |   | + | + | + | + |   |   | + | + | A |   | + | + | + | + |   | + |   |   |  |   |
| Intestine Large, Cecum Dilatation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Intestine Large, Colon Dilatation        | + | + |   |   |   |   |   | + |   | + | + | A | + |   |   | A | A |   |   | + | A | A | A | + | A | + |   |  |   |
| Intestine Small, Ileum Dilatation        | + | + |   |   |   |   | A |   | + | + | A | + |   |   | A | A |   |   | + | A | A | A | + | A | + |   |   |  |   |
| Intestine Small, Jejunum                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Liver                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |   |
| Angiectasis                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 2 |  |   |
| Basophilic Focus                         | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | X |
| Clear Cell Focus                         | X |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   |   |   |   |   |   |   |   |  |   |
| Degeneration, Cystic                     | 1 |   | 2 | 2 | 2 |   |   |   |   | 1 |   | 3 |   | 1 | 2 |   | 1 |   |   | 2 | 2 | 2 | 2 | 2 | 1 |   |   |  | 1 |
| Fatty Change                             |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Hematopoietic Cell Proliferation         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Hepatodiaphragmatic Nodule               |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Infiltration Cellular, Mononuclear Cell  |   | 1 | 2 | 1 | 2 |   | 2 |   | 1 |   | 1 | 2 | 1 |   |   |   | 1 | 2 | 1 |   | 1 |   | 1 | 1 | 1 |   |   |  | 1 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Mixed Cell Focus                         |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Pigmentation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Tension Lipidosis                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Vacuolization Cytoplasmic                |   |   | 2 |   | 2 |   | 2 | 2 |   |   |   |   | 1 |   |   |   |   | 2 | 1 |   |   | 1 |   |   | 2 |   |   |  | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | males<br>(cont...) |   |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------------------|---|
|  | 0676        | 0677   | 0678   | 0679   | 0680   | 0681   | 0682   | 0683   | 0684   | 0685   | 0686   | 0687   | 0688   | 0689   | 0690   | 0691   | 0692   | 0693   | 0694   | 0695   | 0696   | 0697   | 0698   | 0699   |                    |   |
| ANIMAL ID  | 011211      | 011222 | 011233 | 011244 | 011255 | 011266 | 011277 | 011288 | 011299 | 011300 | 011311 | 011322 | 011333 | 011344 | 011355 | 011366 | 011377 | 011388 | 011399 | 011400 | 011411 | 011422 | 011433 | 011444 |                    |   |
| Bile Duct, Hyperplasia                                 |             | 1      |        | 1      | 2      |        |        |        | 1      |        |        | 3      |        |        | 3      | 1      | 2      | 1      |        | 2      |        | 1      | 1      | 2      | 2                  |   |
| Biliary Tract, Cyst                                    |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | X      |        |        |        |        |        | X      |                    |   |
| Biliary Tract, Fibrosis                                | 1           | 1      |        | 1      |        |        |        | 2      |        |        |        |        |        |        | 2      |        |        | 1      |        | 2      |        | 1      |        | 2      | 2                  |   |
| Capsule, Hemorrhage                                    |             |        |        |        |        |        |        |        |        |        |        |        |        |        | 2      |        |        |        |        |        |        |        |        |        |                    |   |
| Hepatocyte, Necrosis                                   |             |        |        |        |        |        |        | 2      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Oval Cell, Hyperplasia                                 |             |        |        |        | 2      |        |        |        |        |        |        | 2      |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Mesentery  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Fat, Necrosis  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Oral Mucosa  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Pancreas   | +           | +      | +      | +      | +      | A      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | A      | +      | +      | +      | +      | +                  |   |
| Basophilic Focus                                       |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Hemorrhage   |             | 3      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Infiltration Cellular, Lymphocyte                      | 2           | 2      | 1      | 1      |        |        | 1      | 2      | 1      | 2      | 2      | 2      | 1      |        |        |        | 2      | 2      | 2      |        |        | 1      | 3      |        | 2                  | 3 |
| Lipomatosis  |             |        |        |        |        |        |        | 2      | 4      |        | 2      |        |        |        |        | 3      | 3      |        |        |        |        |        | 4      |        |                    |   |
| Pigmentation   |             |        | 1      | 1      |        |        |        | 1      | 1      |        | 1      |        | 1      |        |        | 1      | 1      |        |        | 1      |        |        | 1      |        | 1                  |   |
| Thrombosis   |             | X      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Vacuolization Cytoplasmic                              |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Acinar Cell, Hyperplasia                               |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Acinus, Degeneration                                   |             | 2      | 2      | 2      | 2      |        |        | 2      | 3      | 4      | 1      | 3      | 3      | 2      | 1      | 1      | 4      | 4      | 3      |        |        | 1      | 4      | 1      | 3                  | 4 |
| Artery, Fibrosis                                       |             | 4      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Artery, Inflammation, Chronic Active                   |             | 4      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Artery, Mineralization                                 |             | 2      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Stomach, Forestomach                                   | +           | +      |        |        |        |        | +      |        | +      | +      | +      | +      |        |        |        |        |        |        |        | +      | A      | +      | A      | +      | +                  | + |
| Inflammation, Chronic Active                           |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |
| Ulcer  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |                    |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0676        | 0677 | 0678 | 0679 | 0680 | 0681 | 0682 | 0683 | 0684 | 0685 | 0686 | 0687 | 0688 | 0689 | 0690 | 0691 | 0692 | 0693 | 0694 | 0695 | 0696 | 0697 | 0698 | 0699 |           |                    |
|  | 076         | 077  | 078  | 079  | 080  | 081  | 082  | 083  | 084  | 085  | 086  | 087  | 088  | 089  | 090  | 091  | 092  | 093  | 094  | 095  | 096  | 097  | 098  | 099  | 011       |                    |

Epithelium, Hyperplasia

Stomach, Glandular

Cyst

Hemorrhage

Infiltration Cellular, Polymorphonuclear

Mineralization

Ulcer

Epithelium, Hyperplasia

**CARDIOVASCULAR SYSTEM**

Blood Vessel

Mineralization

Heart

Cardiomyopathy

Inflammation, Chronic

Metaplasia, Osseous

Mineralization

**ENDOCRINE SYSTEM**

Adrenal Cortex

Atrophy

Degeneration, Cystic

Hyperplasia

Hypertrophy

Vacuolization Cytoplasmic

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M   | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |                  |                  |                  |                  |   |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|------------------|------------------|------------------|------------------|---|
|  | 0<br>6<br>7<br>6 | 0<br>6<br>7<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>7 | 0<br>6<br>9<br>8 | 0<br>7<br>2<br>7 | 0<br>6<br>1<br>5 | 0<br>5<br>6<br>4 | 0<br>6<br>2<br>2 | 0<br>6<br>2<br>2 | 0<br>7<br>2<br>2 | 0<br>6<br>2<br>4 | 0<br>4<br>4<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>9 | 0<br>5<br>5<br>6 | 0<br>7<br>0<br>6 | 0<br>6<br>0<br>0 |           |                    | 0<br>6<br>9<br>6 | 0<br>6<br>2<br>4 | 0<br>7<br>2<br>9 | 0<br>6<br>2<br>6 |   |
| Adrenal Medulla Hemorrhage Hyperplasia   | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +         | +                  | +                | +                | +                | 2                | 1 |
| Islets, Pancreatic Hyperplasia   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +         | +                  | +                | +                | +                | 2                | 2 |
| Parathyroid Gland Hyperplasia Inflammation, Chronic Active Necrosis  | +                | +                | +                | +                | +                | +                | +                | +                | +                | 1                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +         | +                  | +                | +                | +                | +                | + |
| Pituitary Gland Angiectasis Hemorrhage Necrosis Pars Distalis, Cyst Pars Distalis, Cyst Multilocular Pars Distalis, Hyperplasia Pars Distalis, Hypertrophy Pars Intermedia, Cyst | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +         | +                  | +                | +                | +                | +                | X |
| Thyroid Gland Ultimobranchial Cyst C-cell, Hyperplasia Follicular Cell, Hyperplasia  | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | A                | A                | +         | A                  | +                | +                | +                | 3                | 3 |

**GENERAL BODY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b><br><br><b>F1 Veh. StDose M</b> | DAY ON TEST | 0<br>6<br>7<br>6      | 0<br>6<br>7<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>9<br>8      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>1      | 0<br>5<br>5<br>5      | 0<br>6<br>4<br>2      | 0<br>6<br>2<br>2      | 0<br>7<br>2<br>7      | 0<br>6<br>4<br>4      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>5<br>5<br>6      | 0<br>7<br>0<br>5      | 0<br>6<br>0<br>0      | 0<br>6<br>9<br>6      | 0<br>6<br>6<br>8      | 0<br>7<br>2<br>4      | 0<br>6<br>9<br>6      | <b>males<br/>(cont...)</b> |
|   | ANIMAL ID   | 0<br>1<br>2<br>1<br>1 | 0<br>1<br>2<br>1<br>1 | 0<br>1<br>2<br>2<br>1 | 0<br>1<br>2<br>3<br>1 | 0<br>1<br>2<br>3<br>2 | 0<br>1<br>2<br>4<br>1 | 0<br>1<br>2<br>4<br>2 | 0<br>1<br>2<br>4<br>1 | 0<br>1<br>3<br>3<br>2 | 0<br>1<br>3<br>3<br>1 | 0<br>3<br>3<br>3<br>1 | 0<br>3<br>3<br>3<br>2 | 0<br>3<br>3<br>8<br>1 | 0<br>3<br>3<br>8<br>2 | 0<br>3<br>3<br>9<br>1 | 0<br>3<br>4<br>9<br>1 | 0<br>3<br>4<br>9<br>2 | 0<br>3<br>4<br>4<br>1 | 0<br>3<br>5<br>4<br>1 | 0<br>5<br>5<br>3<br>2 | 0<br>5<br>5<br>3<br>1 | 0<br>5<br>5<br>4<br>2 | 0<br>5<br>5<br>4<br>1 |                            |

NONE

**GENITAL SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + |
| Exfoliated Germ Cell              | 2 | 1 |   |   |   |   |   |   |   |   |   | 3 | 2 | 1 |   |   |   |   |   | 1 |   |   |   |   | 2 |
| Hypospermia                       |   |   |   |   | 4 | 4 | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 | 1 | 2 | 1 | 1 |   |   |   |   |   |   |   | 2 |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Preputial Gland                   |   | + | + |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   | + | + |   |   |   |   | + |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cyst                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                    |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Inflammation, Suppurative         |   | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   | 4 |
| Inflammation, Granulomatous       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Duct, Dilatation                  |   | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 3 | 4 |   |   |   |   | 4 |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + |   |
| Cyst, Mucinous                    |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |
| Fibrosis                          | 3 |   |   |   |   |   | 2 |   |   | 2 | 2 | 2 | 3 |   | 2 | 1 |   |   |   |   |   |   |   | 3 |   |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M   | DAY ON TEST |        |       |       |       |       |       |       |       |       | ANIMAL ID |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |       |
|--|-------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|
|  | 06776       | 067722 | 07777 | 07777 | 06766 | 07777 | 06766 | 05555 | 06666 | 07777 | 07776     | 04744 | 07777 | 07777 | 07777 | 05555 | 05557 | 07000 | 06660 | 06660 |                    | 06669 | 06668 | 06774 | 06669 |
| Infiltration Cellular, Lymphocyte<br>Inflammation, Suppurative<br>Inflammation, Chronic Active<br>Mineralization<br>Polyarteritis  | 2           | 1      | 1     | 1     | 1     | 2     | 1     | 1     | 2     | 2     | 2         | 2     | 1     | 1     | 1     | 1     | 1     | 2     | 2     | 2     | 2                  | 1     | 2     | 2     | 1     |
| Prostate, Ventral Lobe<br>Atrophy<br>Fibrosis<br>Hemorrhage<br>Infiltration Cellular, Lymphocyte<br>Inflammation, Suppurative<br>Inflammation, Chronic Active<br>Mineralization<br>Necrosis<br>Epithelium, Hyperplasia | +           | +      | +     | +     | +     | A     | +     | +     | +     | +     | +         | +     | +     | +     | +     | +     | +     | A     | +     | +     | +                  | +     | +     | +     |       |
| Seminal Vesicle<br>Atrophy<br>Concretion<br>Inflammation, Chronic Active<br>Epithelium, Hyperplasia<br>Lumen, Dilatation   | 2           | 2      |       |       |       |       |       |       |       |       |           | A     | A     | +     | +     | +     | +     | A     | A     | +     | +                  | A     | +     | +     |       |
| Testes<br>Polyarteritis<br>Seminiferous Tubule, Degeneration   | +           | +      | +     | +     | +     | +     | +     | +     | +     | +     | +         | +     | +     | +     | +     | +     | +     | A     | +     | +     | +                  | +     | +     | +     |       |
|  | 1           | 1      | 2     | 2     | 3     | 4     | 4     | 4     | 4     | 4     | 1         | 2     | 1     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 2                  | 4     | 4     |       |       |

**HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | ANIMAL ID             | males<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|-----------------------|--------------------|
|  | 0<br>6<br>7<br>6 | 0<br>6<br>7<br>6 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>7 | 0<br>6<br>9<br>8 | 0<br>7<br>2<br>7 | 0<br>6<br>1<br>1 | 0<br>5<br>5<br>5 | 0<br>6<br>4<br>2 | 0<br>6<br>2<br>7 | 0<br>6<br>2<br>4 | 0<br>4<br>4<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>9 | 0<br>5<br>5<br>6 | 0<br>7<br>0<br>5 | 0<br>6<br>0<br>6 | 0<br>6<br>9<br>8 | 0<br>6<br>6<br>4 | 0<br>7<br>2<br>4 | 0<br>6<br>9<br>6 |   |                       |                    |
| Bone Marrow  | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | + | 0<br>1<br>2<br>1<br>1 | males<br>(cont...) |
| Myeloid Cell, Hyperplasia                              |                  |                  |                  |                  | 3                |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>1<br>1 | males<br>(cont...) |
| Lymph Node   |                  | +                |                  |                  | +                |                  | +                |                  |                  |                  | +                | +                |                  |                  |                  |                  |                  |                  |                  | +                |                  | +                |                  | + | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Axillary, Hyperplasia, Lymphoid                        |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Axillary, Infiltration Cellular, Plasma Cell           |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Lumbar, Degeneration, Cystic                           |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Lumbar, Hyperplasia, Lymphoid                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  | 3                |                  | 4                |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Lumbar, Infiltration Cellular, Plasma Cell             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  | 4                |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Renal, Degeneration, Cystic                            |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  | 4                | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Renal, Hemorrhage                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Renal, Hyperplasia, Lymphoid                           |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Renal, Infiltration Cellular, Plasma Cell              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Lymph Node, Mandibular                                 |                  |                  |                  |                  |                  | A                |                  |                  |                  |                  | +                |                  |                  |                  |                  |                  |                  |                  |                  | +                |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Degeneration, Cystic                                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Hyperplasia, Lymphoid                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Infiltration Cellular, Plasma Cell                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Lymph Node, Mesenteric                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 1<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Spleen   | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | + | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Hematopoietic Cell Proliferation                       | 4                | 3                |                  | 2                | 2                |                  | 1                | 4                |                  | 1                | 4                |                  |                  |                  |                  |                  |                  |                  | 2                |                  | 1                |                  |                  | 2 | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Hemorrhage   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Hyperplasia, Lymphoid                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |   | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Necrosis   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |   | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Pigmentation   | 2                | 1                | 1                | 2                | 3                |                  |                  |                  | 1                | 1                |                  |                  |                  |                  | 2                | 2                |                  |                  | 1                | 4                |                  |                  | 3                |   | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Polyarteritis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |   | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |
| Thymus   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +                | + | 2<br>1<br>2<br>2<br>1 | males<br>(cont...) |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |                       |   |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|  | 0<br>6<br>7<br>6      | 0<br>6<br>7<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>9<br>8      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>1      | 0<br>5<br>5<br>5      | 0<br>6<br>4<br>7      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>4      | 0<br>4<br>4<br>9      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>5<br>5<br>6      | 0<br>5<br>7<br>5      | 0<br>7<br>0<br>6      | 0<br>6<br>0<br>0      |                       |                       | 0<br>6<br>9<br>8      | 0<br>6<br>2<br>4      | 0<br>7<br>2<br>6      | 0<br>6<br>9<br>4      |   |
|  | 0<br>1<br>2<br>1<br>1 | 0<br>1<br>2<br>1<br>1 | 0<br>1<br>2<br>2<br>2 | 0<br>1<br>2<br>2<br>3 | 0<br>1<br>2<br>2<br>3 | 0<br>1<br>2<br>2<br>4 | 0<br>1<br>2<br>2<br>4 | 0<br>1<br>2<br>2<br>5 | 0<br>1<br>2<br>2<br>5 | 0<br>3<br>3<br>3<br>7 | 0<br>3<br>3<br>3<br>8 | 0<br>3<br>3<br>3<br>8 | 0<br>3<br>3<br>3<br>9 | 0<br>3<br>3<br>3<br>9 | 0<br>3<br>3<br>3<br>0 | 0<br>3<br>3<br>3<br>1 | 0<br>3<br>3<br>3<br>1 | 0<br>3<br>3<br>3<br>2 | 0<br>3<br>3<br>3<br>3 | 0<br>5<br>4<br>1<br>1 | 0<br>5<br>5<br>3<br>3 | 0<br>5<br>5<br>3<br>4 | 0<br>5<br>5<br>4<br>1 | 0<br>5<br>5<br>4<br>2 | 0<br>5<br>5<br>4<br>5 | 0<br>5<br>5<br>4<br>1 |   |
| Atrophy  | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4 |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
|------------------------------------|---|---|---|---|---|---|---|---|--|---|---|---|--|---|---|---|---|---|---|---|---|---|--|--|--|--|--|
| Mammary Gland                      | + + + + + + + + + + + + + + + + + + A + + + + + + |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Atypical Focus                     | 2   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Galactocoele                       | X   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Mineralization                     | 3   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Alveolus, Degeneration             | 4   | 3 |   |   |   | 4 | 4 | 4 |  | 2 |   | 4 |  |   | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 3 |  |  |  |  |  |
| Alveolus, Dilatation               |   |   | 2 | 2 | 2 |   |   |   |  | 3 | 2 | 2 |  |   | 2 |   |   |   |   | 2 |   |   |  |  |  |  |  |
| Duct, Dilatation                   | 2   |   | 2 | 2 | 2 |   |   |   |  | 3 | 2 | 3 |  |   | 2 |   |   |   |   | 2 |   |   |  |  |  |  |  |
| Skin                               |   |   | + | + |   | + | + | + |  |   |   |   |  | + | + | + |   |   |   | + | + |   |  |  |  |  |  |
| Cyst Epithelial Inclusion          |   |   | X | X |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Hyperkeratosis                     |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Inflammation, Suppurative          |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   | 3 |   |   |   |   |   |  |  |  |  |  |
| Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |  | 3 |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |  | 4 |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foot, Edema                        |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foot, Fibrosis                     |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foot, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foot, Necrosis                     |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Foot, Ulcer                        |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |  |  |  |  |
| Sebaceous Gland, Hyperplasia       |   |   |   |   |   |   |   |   |  |   |   |   |  |   |   |   | 3 |   |   |   |   |   |  |  |  |  |  |

MUSCULOSKELETAL SYSTEM

|                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Humerus, Abscess |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                         | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |
|--|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
|  |                         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |                         | 6           | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 5 | 6 | 6 | 7 | 6 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 6 | 6 | 6 | 7 | 6                  |
|  | <b>F1 Veh. StDose M</b> | 7           | 7 | 2 | 2 | 2 | 9 | 2 | 1 | 5 | 4 | 2 | 2 | 2 | 4 | 2 | 2 | 8 | 8 | 2 | 5 | 7 | 0 | 9 | 6 | 2                  |
|  |                         | 6           | 6 | 7 | 7 | 7 | 8 | 7 | 1 | 5 | 7 | 2 | 7 | 4 | 9 | 8 | 8 | 9 | 6 | 5 | 6 | 0 | 0 | 6 | 4 | 6                  |
|  | ANIMAL ID               | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  |
|  |                         | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5                  |
|  |                         | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |                    |
|  |                         | 1           | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 5 |                    |
|  |                         | 1           | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |                    |

Humerus, Osteopetrosis  
Mandible, Osteopetrosis

4

Bone, Femur  
Fibrous Osteodystrophy  
Osteopetrosis

+ +

2 2

4

Skeletal Muscle

+

NERVOUS SYSTEM

Brain, Brain Stem  
Compression  
Hemorrhage

+  
2 2 4 3 2 3 2

Brain, Cerebellum

+ + + + + A + + + + + + + + + + + + + + + + + +

Brain, Cerebrum  
Ventricle, Dilatation

+ + + + + A + + + + + + + + + + + + + + + + + +  
1 2 2 1

Nerve Trigeminal  
Axon, Degeneration

+ 1 +

Peripheral Nerve, Sciatic

+ +

Peripheral Nerve, Tibial

+ +

Spinal Cord, Cervical

+ +

Spinal Cord, Lumbar

+ +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                    |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST | 0<br>6<br>7<br>6      | 0<br>6<br>7<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>9<br>8      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>5      | 0<br>5<br>6<br>4      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>2      | 0<br>7<br>2<br>4      | 0<br>4<br>4<br>9      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>5<br>5<br>6      | 0<br>5<br>7<br>5      | 0<br>7<br>0<br>6      | 0<br>6<br>0<br>0      | 0<br>6<br>9<br>6      | 0<br>6<br>6<br>8      | 0<br>7<br>2<br>4      | 0<br>6<br>9<br>6      | males<br>(cont...) |
|  | ANIMAL ID   | 0<br>1<br>2<br>1<br>1 | 0<br>1<br>2<br>1<br>2 | 0<br>1<br>2<br>2<br>1 | 0<br>1<br>2<br>3<br>2 | 0<br>1<br>2<br>3<br>1 | 0<br>1<br>2<br>4<br>2 | 0<br>1<br>2<br>5<br>1 | 0<br>1<br>2<br>7<br>2 | 0<br>1<br>3<br>5<br>1 | 0<br>3<br>3<br>7<br>1 | 0<br>3<br>3<br>8<br>2 | 0<br>3<br>3<br>9<br>1 | 0<br>3<br>3<br>9<br>2 | 0<br>3<br>3<br>9<br>1 | 0<br>3<br>3<br>9<br>2 | 0<br>3<br>3<br>9<br>1 | 0<br>3<br>3<br>9<br>2 | 0<br>3<br>3<br>9<br>1 | 0<br>3<br>3<br>9<br>2 | 0<br>5<br>5<br>1<br>3 | 0<br>5<br>5<br>3<br>2 | 0<br>5<br>5<br>4<br>1 | 0<br>5<br>5<br>4<br>2 |                    |

SPECIAL SENSES SYSTEM

|                                      |   |
|--------------------------------------|---|
| Eye                                  | + |
| Cataract                             | 1 |
| Cornea, Inflammation, Chronic Active | 2 |
| Cornea, Mineralization               |   |
| Retina, Degeneration                 | 4 |

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Fibrosis                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infarct                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Mineralization                           | 4 | 3 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   | 1 |   |   |
| Nephropathy                              | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 1 | 3 | 4 | 4 | 4 | 2 | 1 | 4 | 4 | 3 | 1 | 4 | 3 |   | 4 | 4 | 2 | 2 |
| Polycystic Kidney                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |
| Cortex, Cyst                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Cyst                       |   | X | X | X |   |   |   |   |   | X | X |   |   |   | X | X |   |   |   |   |   |   |   | X |   |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   | 1 |   | 2 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + | + | + |   |   |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 | 4 | 4 |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                         | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |
|--|-------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|
|  |                         | 0681        | 0727 | 0644 | 0728 | 0779 | 0775 | 0667 | 0663 | 0559 | 0669 | 0003 | 0704 | 0662 | 0662 | 0722 | 0772 | 0488 | 0722 | 0397 | 0667 |          | 0553 | 0725 | 0519 | 0542 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> | <b>F1 Veh. StDose M</b> | 0552        | 0551 | 0555 | 0555 | 0554 | 0774 | 0774 | 0775 | 0775 | 0775 | 0775 | 0775 | 0775 | 0775 | 0775 | 0993 | 0993 | 0993 | 0993 | 0993 | 0993     | 0993 | 0993 | 0993 | 0993 |
|  | <b>ANIMAL ID</b>        | 552         | 551  | 555  | 555  | 554  | 774  | 774  | 775  | 775  | 775  | 775  | 775  | 775  | 775  | 775  | 993  | 993  | 993  | 993  | 993  | 993      | 993  | 993  | 993  | 993  |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|
| Esophagus                                | + | + |   | + | + | + | + | + | + |   | + | + |   | + | + | + | + | + | + | + | + | + | + | + | +   | 32 |
| Intestine Large, Cecum Dilatation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 4  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1  |
| Intestine Large, Colon Dilatation        | + | + |   | + | + | + | + | + | A |   | A | + |   | + | + | + | A | + |   | A | A |   |   |   |     | 21 |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 3  |
| Intestine Small, Ileum Dilatation        | + | + |   | + | + | + | + | + | A |   | A | + |   | + | + | + | A | + |   | A | A |   |   |   |     | 20 |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 2  |
| Intestine Small, Jejunum                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | +  |
| Liver                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 |
| Angiectasis                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 3  |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 2  |
| Basophilic Focus                         | X |   |   |   |   | X |   |   |   |   |   |   |   | X |   | X |   |   | X |   | X |   |   |   | 9   |    |
| Clear Cell Focus                         |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   | 7   |    |
| Degeneration, Cystic                     | 1 | 2 |   | 2 |   | 1 |   | 1 | 1 | 1 |   | 2 | 2 |   | 1 |   |   |   | 2 | 1 | 1 |   |   |   | 28  |    |
| Fatty Change                             | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 5   |    |
| Hematopoietic Cell Proliferation         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |    |
| Hepatodiaphragmatic Nodule               |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3   |    |
| Infiltration Cellular, Mononuclear Cell  | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 |   | 2 |   | 1 | 1 |   | 1 | 2 |   |   | 1 | 2 | 1 |   |   | 34  |    |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
| Mixed Cell Focus                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |    |
| Pigmentation                             |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
| Tension Lipidosis                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
| Vacuolization Cytoplasmic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4   |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 14  |    |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1.8 |    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|  | 0681        | 0727  | 0644  | 0728  | 0779  | 0775  | 0677  | 0667  | 0559  | 0669  | 0007  | 0066  | 0077  | 0066  | 0077  | 0044  | 0077  | 0033  | 0066  | 0066  |          | 0055  | 0077  | 0055  |
| ANIMAL ID  | 05552       | 05551 | 05562 | 05571 | 05572 | 05577 | 05574 | 05544 | 05555 | 05555 | 05555 | 05555 | 05555 | 05555 | 05533 | 05533 | 05533 | 05533 | 05533 | 05533 | 05533    | 05533 | 05533 | 05533 |
| Bile Duct, Hyperplasia                                 |             | 2     | 1     | 1     |       |       |       |       |       | 1     |       |       |       |       | 1     |       |       |       |       |       |          |       |       |       |
| Biliary Tract, Cyst                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Biliary Tract, Fibrosis                                | 1           | 1     | 1     | 1     | 2     | 2     | 2     | 1     |       | 1     |       | 1     |       |       | 2     |       |       |       | 1     | 2     |          | 1     |       |       |
| Capsule, Hemorrhage                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Hepatocyte, Necrosis                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Oval Cell, Hyperplasia                                 |             |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Mesentery  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1     |
| Fat, Necrosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1     |
| Oral Mucosa  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | +     |
| Pancreas   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     |       |
| Basophilic Focus                                       |             |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |          |       |       |       |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Infiltration Cellular, Lymphocyte                      | 1           | 2     | 3     | 2     | 2     | 2     | 2     |       | 2     |       |       | 3     | 2     | 1     | 3     | 2     | 1     | 2     | 1     |       | 3        | 1     |       | 2     |
| Lipomatosis  |             |       |       | 2     |       | 3     |       | 3     |       |       |       | 2     |       |       |       | 3     |       | 4     |       |       | 2        |       |       |       |
| Pigmentation   |             | 1     | 2     |       |       | 1     |       |       | 1     | 1     |       | 2     | 1     |       | 2     |       | 1     |       | 1     |       | 1        |       |       |       |
| Thrombosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Vacuolization Cytoplasmic                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |       |       |
| Acinar Cell, Hyperplasia                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       | 4        |       |       |       |
| Acinus, Degeneration                                   | 2           | 4     | 3     | 3     | 3     | 3     | 3     |       | 4     |       |       | 3     | 2     | 1     | 3     | 3     | 2     | 3     | 1     |       | 3        | 2     | 1     | 4     |
| Artery, Fibrosis                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Artery, Inflammation, Chronic Active                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Artery, Mineralization                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Stomach, Forestomach                                   | +           |       | +     |       |       | +     | +     | +     | +     | +     | +     |       | +     | +     |       |       | +     |       | +     | +     | +        | +     | +     | 31    |
| Inflammation, Chronic Active                           |             |       | 4     |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |          |       |       | 2     |
| Ulcer  |             |       | 4     |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |          |       |       | 2     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |      |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|------|-----|
|  | 0681        | 0727  | 0644  | 0728  | 0779  | 0775  | 0667  | 0667  | 0559  | 0666  | 0003  | 0704  | 0662  | 0722  | 0772  | 0484  | 0722  | 0397  | 0662  | 0553  |          | 0725  | 0571  | 0554  | 0554 |     |
| ANIMAL ID  | 05552       | 05551 | 05562 | 05571 | 05572 | 05574 | 05574 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575 | 05575    | 05575 | 05575 | 05575 |      |     |
| Epithelium, Hyperplasia                                | 4           |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2    | 4.0 |
| Stomach, Glandular                                     | +           | +     | +     |       |       | +     | +     | +     | +     | +     | A     |       | +     | +     |       |       | +     | +     | +     | +     | +        |       | +     | A     | 30   |     |
| Cyst   |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1    |     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |          |       |       |       | 1    | 2.0 |
| Infiltration Cellular, Polymorphonuclear               |             |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |          |       |       |       | 1    | 3.0 |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       | 4     |       | 2     |       |       |       |       |       | 4        |       |       |       | 7    | 3.4 |
| Ulcer  |             |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |          |       |       |       | 1    | 3.0 |
| Epithelium, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          |       |       |       | 2    | 4.0 |
| <b>CARDIOVASCULAR SYSTEM</b>                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |      |     |
| Blood Vessel   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 50   |     |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       | 4     |       | 4     |       |       |       |       |       |       | 3        |       | 4     |       | 8    | 3.9 |
| Heart  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 50    |      |     |
| Cardiomyopathy   | 2           | 2     | 1     | 2     | 2     | 2     |       | 2     | 2     | 3     | 2     | 2     | 3     | 1     | 1     | 2     |       | 2     | 1     | 2     | 4        | 1     | 4     | 3     | 45   | 2.3 |
| Inflammation, Chronic                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1    | 2.0 |
| Metaplasia, Osseous                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2    | 2.0 |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       | 4     |       | 4     |       |       |       |       |       |       | 3        |       | 3     |       | 9    | 3.4 |
| <b>ENDOCRINE SYSTEM</b>                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |      |     |
| Adrenal Cortex   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 47    |      |     |
| Atrophy  |             |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1    | 4.0 |
| Degeneration, Cystic                                   |             |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 3    | 2.3 |
| Hyperplasia  |             |       |       |       |       |       |       | 1     |       |       |       | 2     |       |       | 1     |       |       |       |       |       |          |       |       |       | 5    | 1.2 |
| Hypertrophy  |             | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |       |       | 2    | 2.5 |
| Vacuolization Cytoplasmic                              |             |       |       |       |       |       |       |       | 2     |       | 3     |       | 2     | 2     | 1     |       |       | 2     | 2     |       | 1        | 3     | 1     |       | 21   | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M   | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |        |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|--------|
|  | 0681        | 0727  | 0644  | 0728  | 0772  | 0775  | 0666  | 0666  | 0555  | 0666  | 0555  | 0666  | 0666  | 0777  | 0666  | 0666  | 0777  | 0777  | 0444  | 0777  |          | 0333  | 0666  | 0666  | 0555  | 0777  | 0555  | 0555   |
| ANIMAL ID  | 05552       | 05551 | 05552 | 05551 | 05551 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552    | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551  |
| Adrenal Medulla Hemorrhage Hyperplasia   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | 47     |
|  | 3           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 3.0  |
|  | 2           | 2     | 3     |       |       |       |       |       |       |       | 2     |       |       |       |       |       | 2     |       |       |       | 1        |       |       |       |       |       |       | 8 1.9  |
| Islets, Pancreatic Hyperplasia   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | 48     |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 2 2.0  |
| Parathyroid Gland Hyperplasia Inflammation, Chronic Active Necrosis  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | 49     |
|  |             |       | 3     |       | 2     |       | 2     | 2     |       |       | 4     |       | 3     | 3     |       |       | 2     |       |       |       | 2        | 2     |       | 4     | 4     | 4     |       | 22 2.8 |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 2.0  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 4.0  |
| Pituitary Gland Angiectasis Hemorrhage Necrosis Pars Distalis, Cyst Pars Distalis, Cyst Multilocular Pars Distalis, Hyperplasia Pars Distalis, Hypertrophy Pars Intermedia, Cyst | +           | +     | +     | +     | +     | +     | M     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | A     | +     | 46     |
|  |             | 4     |       | 3     |       |       |       |       |       |       |       |       |       |       |       | 4     |       | 4     |       |       |          |       |       | 4     |       |       |       | 14 3.5 |
|  |             |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 3.0  |
|  |             |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 3.0  |
|  | X           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 4      |
|  |             |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 2      |
|  | 2           |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 3        | 2     |       |       |       |       |       | 12 2.8 |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1 3.0  |
|  |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 2      |
| Thyroid Gland Ultimobranchial Cyst C-cell, Hyperplasia Follicular Cell, Hyperplasia  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | A     | +     | 43     |
|  |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | X     |       |       | 3      |
|  | 1           | 2     |       | 3     |       |       | 2     |       | 1     |       |       |       | 2     |       |       |       |       |       | 2     |       |          |       |       | 2     |       |       |       | 12 1.8 |
|  |             |       | 2     |       | 2     | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2     |       |       |       |       | 6 2.5  |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|  | 0681        | 0727  | 0644  | 0728  | 0779  | 0775  | 0677  | 0663  | 0559  | 0669  | 0007  | 0672  | 0662  | 0772  | 0772  | 0488  | 0727  | 0339  | 0662  | 0665  |          | 0573  | 0725  | 0519  | 0554  |
| ANIMAL ID  | 05552       | 05561 | 05562 | 05571 | 05572 | 05741 | 05742 | 05751 | 05752 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755 | 05755    | 05755 | 05755 | 05755 | 05755 |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     | 0     | 0     |

NONE

**GENITAL SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  |               |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--|--|---------------|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | <b>45</b> |  |  |               |
| Atrophy                           |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1 3.0</b>  |
| Inflammation, Suppurative         |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1 4.0</b>  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1 3.0</b>  |
| Necrosis                          |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1 4.0</b>  |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1 4.0</b>  |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b> |  |  |               |
| Exfoliated Germ Cell              |   |   | 2 |   |   |   |   |   |   | 3 | 2 |   |   |   |   |   |   |   |   |   | 3 | 2 |   |           |  |  | <b>12 2.0</b> |
| Hypospermia                       |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   | 4 | 4 | 4 |   | 4 |   |           |  |  | <b>14 4.0</b> |
| Infiltration Cellular, Lymphocyte |   | 2 |   | 1 | 1 |   |   |   | 1 | 2 |   |   |   |   |   | 1 |   |   |   |   | 2 |   |   |           |  |  | <b>14 1.4</b> |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |           |  |  | <b>2 1.0</b>  |
| Preputial Gland                   |   |   | + |   |   |   |   |   | + |   |   |   | + |   |   | + |   | + | + |   | + |   |   | <b>14</b> |  |  |               |
| Atrophy                           |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>2 3.0</b>  |
| Cyst                              |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |  |  | <b>1</b>      |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |           |  |  | <b>3 4.0</b>  |
| Inflammation, Suppurative         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 4 |   |   |   |           |  |  | <b>9 3.8</b>  |
| Inflammation, Granulomatous       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |           |  |  | <b>1 3.0</b>  |
| Duct, Dilatation                  |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 | 3 |   |   |   |   |           |  |  | <b>11 3.6</b> |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |           |  |  | <b>1 4.0</b>  |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | <b>46</b> |  |  |               |
| Cyst, Mucinous                    |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |           |  |  | <b>6</b>      |
| Fibrosis                          |   |   | 3 | 4 |   | 3 | 4 |   | 3 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |           |  |  | <b>15 2.7</b> |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |           |  |  | <b>1 4.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |       |      |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|------|-----|
|  | 0681        | 0727  | 0644  | 0728  | 0772  | 0775  | 0666  | 0666  | 0555  | 0666  | 0555  | 0666  | 0700  | 0707  | 0666  | 0666  | 0707  | 0707  | 0444  | 0773  |          | 0666  | 0666  | 0555  | 0772  | 0555  | 0772  | 0555  | 0555 |     |
| ANIMAL ID  | 05552       | 05551 | 05552 | 05551 | 05551 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05557 | 05559 | 05559 | 05559 | 05559 | 05559    | 05559 | 05559 | 05559 | 05559 | 05559 | 05559 | 05559 |      |     |
| Infiltration Cellular, Lymphocyte                      |             |       | 2     | 4     | 1     | 3     | 4     |       | 2     | 1     |       |       |       | 1     | 1     | 2     |       |       |       |       | 1        |       |       |       |       |       |       |       | 31   | 1.6 |
| Inflammation, Suppurative                              | 2           | 2     | 2     | 4     | 1     | 3     |       |       | 2     | 4     |       |       | 2     | 4     | 2     | 1     | 2     | 1     | 1     | 2     |          | 2     | 1     | 2     |       |       |       | 39    | 2.2  |     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 1    | 4.0 |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 1    | 2.0 |
| Polyarteritis  |             |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 1    | 1.0 |
| Prostate, Ventral Lobe                                 | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | +     | 48   |     |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 2    | 3.0 |
| Fibrosis   |             |       | 2     | 4     |       |       | 4     | 3     |       | 2     |       | 2     | 4     |       |       | 2     | 1     |       |       |       |          | 2     |       |       |       | 3     |       | 17    | 2.4  |     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 1    | 4.0 |
| Infiltration Cellular, Lymphocyte                      |             |       | 1     | 3     |       |       | 4     | 2     |       | 1     |       |       |       |       |       | 2     | 1     |       |       |       |          | 1     |       |       | 2     |       |       | 19    | 1.7  |     |
| Inflammation, Suppurative                              |             |       | 1     | 4     |       |       |       |       |       | 1     |       |       | 4     |       |       | 2     |       |       |       |       |          | 1     |       |       |       |       |       | 10    | 2.0  |     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 4.0  |     |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 3     | 1.7  |     |
| Necrosis   |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 4.0  |     |
| Epithelium, Hyperplasia                                |             |       | 3     | 2     | 2     |       |       |       | 2     |       |       |       |       | 2     |       | 2     |       |       |       |       |          |       |       | 2     | 3     | 2     |       | 17    | 2.4  |     |
| Seminal Vesicle  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A        | +     | +     | A     | A     |       |       | 39    |      |     |
| Atrophy  |             |       | 3     | 3     |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 5     | 2.8  |     |
| Concretion   |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     |      |     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 3.0  |     |
| Epithelium, Hyperplasia                                |             |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |          | 3     | 2     |       |       |       | 5     | 2.8   |      |     |
| Lumen, Dilatation                                      |             |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |          |       |       | 3     |       |       | 6     | 3.0   |      |     |
| Testes   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | +     | 49   |     |
| Polyarteritis  |             |       | 3     | 1     | 2     |       |       |       |       | 3     |       | 2     | 2     |       |       |       |       |       |       |       |          | 3     | 2     | 4     |       |       |       | 18    | 2.0  |     |
| Seminiferous Tubule, Degeneration                      |             | 4     | 3     | 1     | 2     | 2     | 4     |       | 1     | 3     |       | 2     | 1     |       |       | 1     | 4     |       |       |       | 4        | 4     | 4     | 3     | 4     |       | 34    | 2.6   |      |     |

HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |        |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|--------|
|  | 0681        | 0727  | 0644  | 0728  | 0772  | 0775  | 0676  | 0666  | 0555  | 0666  | 0000  | 0707  | 0666  | 0666  | 0777  | 0777  | 0444  | 0777  | 0333  | 0666  |          | 0666  | 0555  | 0777  | 0555   |
| ANIMAL ID  | 05552       | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552 | 05551 | 05552    | 05551 | 05552 | 05551 | 05552  |
| Bone Marrow<br>Myeloid Cell, Hyperplasia               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 47     |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       | 3        |       |       |       | 4 3.0  |
| Lymph Node<br>Axillary, Hyperplasia, Lymphoid          |             | +     | +     |       |       |       |       |       |       |       |       |       |       |       | +     |       |       |       |       |       | +        | +     | +     | +     | 16     |
| Axillary, Infiltration Cellular, Plasma Cell           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2 4.0  |
| Lumbar, Degeneration, Cystic                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |          |       |       |       | 3 3.7  |
| Lumbar, Hyperplasia, Lymphoid                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |          |       |       |       | 4 3.0  |
| Lumbar, Infiltration Cellular, Plasma Cell             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2 4.0  |
| Renal, Degeneration, Cystic                            |             |       | 3     | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |       | 4     | 4     | 8 3.8  |
| Renal, Hemorrhage                                      |             | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1 3.0  |
| Renal, Hyperplasia, Lymphoid                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 3 3.3  |
| Renal, Infiltration Cellular, Plasma Cell              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3     | 4     |       | 3 3.7  |
| Lymph Node, Mandibular<br>Degeneration, Cystic         |             |       |       |       |       |       |       |       |       | +     |       |       |       |       | +     | +     |       |       |       |       | +        |       | +     | +     | 8      |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2 3.0  |
| Infiltration Cellular, Plasma Cell                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4 3.5  |
|  |             |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 6 4.0  |
| Lymph Node, Mesenteric                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | +     |       | 1      |
| Spleen<br>Hematopoietic Cell Proliferation             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 47    |        |
| Hemorrhage   |             |       |       |       |       |       |       |       | 2     |       | 4     |       |       |       |       |       |       |       |       |       | 3        | 4     |       |       | 16 2.7 |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 4     | 1 4.0  |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 4     | 1 2.0  |
| Pigmentation   |             |       | 2     | 2     | 4     | 3     |       | 3     |       | 2     | 2     |       | 2     | 2     | 1     |       | 2     |       |       | 2     |          |       | 4     | 4     | 2 4.0  |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 26 2.1 |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1 1.0  |
| Thymus   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 48    |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |      |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|------|------|
|  | 0681        | 0727  | 0644  | 0728  | 0779  | 0775  | 0667  | 0663  | 0559  | 0669  | 0003  | 0704  | 0662  | 0722  | 0772  | 0488  | 0722  | 0397  | 0677  | 0553  |          |       | 0725  | 0519 | 0542 |
| ANIMAL ID  | 05552       | 05561 | 05562 | 05571 | 05572 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577    | 05577 | 05577 |      |      |
| Atrophy  | 4           | 4     | 4     | 3     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4        | 4     | 4     | 47   | 4.0  |

INTEGUMENTARY SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |  |  |   |   |   |   |   |    |     |
|------------------------|---|---|---|---|---|---|---|---|---|---|--|--|--|---|---|--|--|---|---|---|---|---|----|-----|
| Mammary Gland          | + |   |   |   |   |   |   |   |   |   |  |  |  |   |   |  |  |   |   |   |   |   | 49 |     |
| Atypical Focus         |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 2.0 |
| Galactocele            |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |  |  |   |   |   |   |   | X  | 3   |
| Mineralization         |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |  |  |   |   |   |   |   | 1  | 3.0 |
| Alveolus, Degeneration | 3 | 4 | 3 | 4 |   | 3 | 4 |   | 4 | 4 |  |  |  | 4 | 3 |  |  | 4 | 3 |   |   | 3 | 28 | 3.5 |
| Alveolus, Dilatation   |   | 2 |   |   | 3 |   |   | 3 |   |   |  |  |  | 2 | 2 |  |  |   |   | 2 | 3 |   | 15 | 2.3 |
| Duct, Dilatation       |   |   | 2 |   | 3 |   |   | 4 |   |   |  |  |  | 3 | 2 |  |  |   |   |   | 4 |   | 15 | 2.5 |

|                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Skin                               | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 21 |       |
| Cyst Epithelial Inclusion          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  | 6     |
| Hyperkeratosis                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 2 3.5 |
| Inflammation, Suppurative          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 2 2.0 |
| Inflammation, Chronic Active       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 1 3.0 |
| Epithelium, Hyperplasia            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 4 3.3 |
| Epithelium, Foot, Hyperplasia      |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 4.0 |
| Foot, Edema                        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 3.3 |
| Foot, Fibrosis                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 4.0 |
| Foot, Inflammation, Chronic Active |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 4.0 |
| Foot, Necrosis                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 4.0 |
| Foot, Ulcer                        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 3 4.0 |
| Sebaceous Gland, Hyperplasia       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 1 3.0 |

MUSCULOSKELETAL SYSTEM

|                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |
|------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Bone             | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |       |
| Humerus, Abscess |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 1 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 Veh. StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|----------|
|  | 0681        | 0727  | 0644  | 0728  | 0772  | 0776  | 0666  | 0665  | 0566  | 0606  | 0707  | 0666  | 0667  | 0777  | 0474  | 0773  | 0666  | 0665  | 0557  | 0725  | 0571  | 0554  | 0055  | 0052  |  |          |
| ANIMAL ID  | 05552       | 05561 | 05562 | 05561 | 05572 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 |  |          |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |  |          |

Axon, Degeneration

2 1.5

Spinal Cord, Thoracic

2

**RESPIRATORY SYSTEM**

|   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      |        |
|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------|--------|
| Lung  | + | + |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +    | 36     |
| Congestion  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 4.0  |
| Foreign Body  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1      |
| Infiltration Cellular, Histiocyte                     |   |   |  |   |   | 3 |   | 1 |   | 1 |   |   |   | 3 |   |   | 1 |   | 2 |   |   |   |      | 10 1.5 |
| Inflammation, Granulomatous                           |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 2.0  |
| Mineralization  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 3.0  |
| Alveolar Epithelium, Hyperplasia                      |   |   |  |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |      | 1 3.0  |
| Nose  | + | + |  |   | + | + | + | + | + | A |   | + | + |   |   | + | + | + | + | + | + | + | 30   |        |
| Autolysis   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |      | 2 4.0  |
| Fibrous Osteodystrophy                                |   |   |  |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |      | 3 2.0  |
| Foreign Body  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1      |
| Inflammation, Suppurative                             |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 3.0  |
| Osteopetrosis   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 3.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |  |   |   | 4 |   |   | 4 |   |   | 3 |   |   |   |   |   | 4 |   |   |   |   |      | 7 3.1  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |   | 2 |   |   | 2 |   |   | 2 |   |   |   |   |   | 1 |   |   |   |   |      | 5 1.8  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |      | 1 2.0  |
| Upper Molar, Keratin Cyst                             |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |      | 1      |
| Trachea   | + | + |  |   | + | + | + | + | + | A |   | + | + |   |   | + | + | + | + | + | + | + | A 27 |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0675        | 0727  | 0396  | 0778  | 0776  | 0476  | 0778  | 0662  | 0661  | 0777  | 0559  | 0662  | 0778  | 0667  | 0558  | 0668  | 0776  | 0777  | 0667  | 0442  | 0335  | 0773  | 0556  | 0775  |                    |
| ANIMAL ID   | 01371       | 01372 | 01378 | 01382 | 01389 | 01391 | 01392 | 01394 | 01395 | 01397 | 01398 | 01400 | 01401 | 01402 | 01403 | 01404 | 01405 | 01406 | 01407 | 01408 | 01409 | 01410 | 01411 | 01412 | 01413              |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0                  |
|   | 1           | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 5     | 5     | 5     | 5     | 5                  |
|   | 3           | 3     | 3     | 3     | 3     | 3     | 4     | 4     | 4     | 4     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 6     | 6     | 6     | 7     | 7     |                    |
|   | 7           | 7     | 8     | 8     | 9     | 9     | 0     | 0     | 1     | 1     | 3     | 3     | 4     | 4     | 5     | 5     | 6     | 6     | 7     | 7     | 9     | 9     | 0     | 0     | 1                  |
|   | 1           | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1                  |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus Dilatation                         | + | + |   | + | + | + | + | + | + | + | + |   |   |   |   |   |   |   |   | + | + | + |   | + | + |
| Intestine Large, Cecum Hyperplasia, Lymphoid |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon                       | + | + |   | + | + | + | + | + | + | + | A | + | + |   |   |   |   |   | + | A | + |   | + | + |   |
| Intestine Small, Duodenum                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Intestine Small, Ileum                       | + | + |   | + | A | + | A | + | A | + | + |   |   |   |   |   |   |   | + | A | + |   | + | + |   |
| Intestine Small, Jejunum                     |   |   |   | + |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                                  |   |   | 3 | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                             |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Clear Cell Focus                             |   |   |   |   |   |   | X |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |   |   |
| Congestion                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                         |   |   | 1 | 4 | 2 | 1 |   | 2 | 2 |   |   | 1 | 1 |   | 2 |   |   |   | 4 | 1 | 1 |   | 1 | 2 |   |
| Eosinophilic Focus                           |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                                 |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hematopoietic Cell Proliferation             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Infiltration Cellular, Mononuclear Cell      | 1 | 2 |   | 2 | 1 | 1 | 2 | 1 | 2 | 2 |   | 1 | 1 |   | 1 | 1 | 2 | 1 | 1 | 1 |   | 1 | 1 | 2 | 1 |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|   | 0675        | 0772 | 0339 | 0728 | 0772 | 0473 | 0728 | 0660 | 0661 | 0772 | 0552 | 0667 | 0772 | 0667 | 0556 | 0667 | 0772 | 0772 | 0667 | 0448 |           |                    | 0335 | 0773 | 0557 |
| Tension Lipidosis                                     |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Vacuolization Cytoplasmic                             |             |      |      | 3    | 2    |      | 1    |      |      |      | 3    |      |      |      |      | 2    |      | 1    |      |      |           | 1                  |      |      |      |
| Bile Duct, Hyperplasia                                |             |      | 3    |      | 1    | 1    |      |      |      | 2    |      |      | 1    |      |      |      |      | 1    |      |      |           |                    | 2    |      |      |
| Biliary Tract, Fibrosis                               | 2           | 2    |      |      |      |      |      | 1    |      | 1    |      | 1    | 1    |      |      |      | 2    |      | 1    |      |           | 1                  |      | 1    |      |
| Hepatocyte, Necrosis                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |           |                    |      |      |      |
| Hepatocyte, Regeneration                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Oval Cell, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Mesentery   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Fat, Hemorrhage                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Fat, Inflammation, Chronic                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Fat, Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Pancreas  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    |      |
| Basophilic Focus                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Fibrosis  |             | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Infiltration Cellular, Lymphocyte                     | 1           | 3    | 2    | 1    | 2    |      | 3    | 1    | 1    | 2    |      | 2    | 2    |      |      | 1    | 2    | 1    | 2    | 2    |           | 1                  |      | 1    | 2    |
| Lipomatosis   |             |      |      | 4    | 3    |      |      |      |      | 4    | 3    | 3    |      |      |      | 2    |      | 3    | 2    |      |           |                    |      |      |      |
| Pigmentation  | 1           | 2    | 1    | 1    | 2    |      | 1    | 1    |      | 1    | 2    |      | 2    |      | 1    |      |      | 1    | 1    | 2    |           | 1                  |      | 1    | 1    |
| Polyarteritis   |             | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Acinar Cell, Hyperplasia                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      | 3    |
| Acinus, Degeneration                                  | 1           | 3    | 3    | 4    | 4    |      | 3    | 2    | 1    | 4    | 3    | 2    | 3    |      | 1    |      | 4    | 3    | 3    | 4    | 1         | 1                  | 1    | 1    | 2    |
| Stomach, Forestomach                                  | +           |      | +    |      |      | +    |      | +    | +    |      | +    | +    |      |      | +    | +    | +    |      |      |      | +         | +                  | +    | +    | +    |
| Cyst Epithelial Inclusion                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      | X    |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Inflammation, Chronic Active                          |             |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Perforation   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Ulcer   |             |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|
|   | 0675        | 0772  | 0396  | 0728  | 0773  | 0426  | 0776  | 0662  | 0661  | 0771  | 0552  | 0677  | 0676  | 0551  | 0668  | 0773  | 0772  | 0677  | 0677  | 0448  |                    | 0350  | 0737  | 0556  |
| ANIMAL ID   | 01371       | 01372 | 01378 | 01372 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371 | 01371              | 01371 | 01371 | 01371 |

Epithelium, Hyperplasia

3

Stomach, Glandular  
Mineralization

+ +

CARDIOVASCULAR SYSTEM

Blood Vessel  
Mineralization

+ +

Heart  
Cardiomyopathy  
Metaplasia, Osseous  
Mineralization  
Thrombosis

+  
1 3 2 2 2 4 3 3 3 1 4 3 2 1 2 1 4 2 4 1 1 2 2  
X X  
4

ENDOCRINE SYSTEM

Adrenal Cortex  
Angiectasis  
Congestion  
Degeneration, Cystic  
Hyperplasia  
Hypertrophy  
Metaplasia, Osseous  
Vacuolization Cytoplasmic

+  
3  
2  
2  
1 3 2 2 1 2 2 2 3 2 3 2 3 2  
A +

Adrenal Medulla  
Cyst  
Hyperplasia

+  
X  
3  
1 4 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|   | 0675        | 0727 | 0392 | 0772 | 0773 | 0443 | 0772 | 0662 | 0661 | 0777 | 0552 | 0672 | 0678 | 0667 | 0558 | 0668 | 0776 | 0777 | 0666 | 0442 |           |                    | 0330 | 0773 | 0555 |
|   | 0137        | 0133 | 0133 | 0133 | 0133 | 0133 | 0134 | 0134 | 0134 | 0134 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135      | 0135               | 0135 | 0135 | 0135 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Islets, Pancreatic Hemorrhage                    | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland Hyperplasia                    | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Pituitary Gland Angiectasis                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland Mineralization                   |   |   |   |   | 2 |   |   | 4 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 |
| Pituitary Gland Pars Distalis, Cyst              |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Pituitary Gland Pars Distalis, Cyst Multilocular |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pituitary Gland Pars Distalis, Hyperplasia       |   |   | 1 | 3 | 1 |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |
| Pituitary Gland Pars Distalis, Hypertrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pituitary Gland Pars Intermedia, Cyst            |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Thyroid Gland Ultimobranchial Cyst               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Thyroid Gland C-cell, Hyperplasia                | 1 |   | 1 | 1 |   |   |   |   |   |   | 2 | 1 |   |   |   |   |   |   | 2 |   | 2 | 1 |   |   |
| Thyroid Gland Follicular Cell, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |

**GENERAL BODY SYSTEM**

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

**GENITAL SYSTEM**

|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Bulbourethral Gland Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|---|---|---|---|---|---|---|---|---|---|
|   | 0675        | 0727 | 0396 | 0728 | 0773 | 0423 | 0742 | 0662 | 0661 | 0771 | 0552 | 0672 | 0667 | 0551 | 0663 | 0778 | 0772 | 0667 | 0428 | 0330 |           |                    | 0773 | 0556 | 0665 | 0666 |   |   |   |   |   |   |   |   |   |   |
| Atrophy   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3         |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Cyst, Mucinous  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 4                  |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 2                  |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Epididymis  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    |      |      |   |   |   |   |   |   |   |   |   |   |
| Exfoliated Germ Cell                                  | 2           |      | 2    |      |      |      |      | 2    |      |      |      |      |      |      |      |      | 1    |      | 2    |      | 3         |                    |      | 1    |      |      |   |   |   |   |   |   |   |   |   |   |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 2                  |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Hypospermia   | 4           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4         |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte                     |             | 1    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 1                  |      | 2    |      |      | 1 |   | 1 |   |   | 1 |   |   |   |   |
| Inflammation, Suppurative                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1         |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Degeneration                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Mesothelium, Hyperplasia                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3         |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Preputial Gland                                       |             | +    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +    |           |                    |      |      |      |      |   | + | + | + | + |   |   | + |   |   |
| Hyperkeratosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                             |             | 3    |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 4                  |      |      |      |      |   |   |   |   | 4 | 4 |   |   | 4 |   |
| Duct, Dilatation                                      |             | 3    |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 4                  |      |      |      |      |   |   |   |   | 2 | 4 | 4 |   |   | 3 |
| Epithelium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Prostate, Dorsal/lateral Lobe                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    |      |      |   |   |   |   |   |   |   |   |   |   |
| Cyst, Mucinous  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 2                  |      |      |      |      |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte                     |             | 1    |      | 2    |      | 1    |      | 1    | 1    | 1    |      | 4    | 2    |      | 1    |      | 3    |      | 4    | 2    | 1         | 4                  |      | 1    | 1    | 2    |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                             | 1           | 1    | 3    | 3    | 1    | 2    | 2    | 2    | 1    | 1    | 1    | 4    | 3    | 2    | 2    | 1    | 3    | 3    | 2    | 4    | 1         | 1                  | 1    | 2    | 2    |      |   |   |   |   |   |   |   |   |   |   |
| Prostate, Ventral Lobe                                | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    |      |      |   |   |   |   |   |   |   |   |   |   |
| Atrophy   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 3                  |      |      |      |      |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST   |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males<br>(cont...) |   |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M |  | 6 | 7 | 3 | 7 | 7 | 4 | 7 | 6 | 6 | 7 | 5 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | 3 | 7 | 5 |                    |   |
| ANIMAL ID   |  | 7 | 2 | 9 | 2 | 2 | 3 | 2 | 2 | 5 | 2 | 5 | 7 | 2 | 7 | 1 | 3 | 2 | 2 | 2 | 7 | 8 | 5 | 3 | 7 |                    | 5 |
|   |  | 5 | 7 | 6 | 8 | 7 | 6 | 8 | 0 | 1 | 7 | 9 | 2 | 8 | 7 | 8 | 8 | 6 | 7 | 7 | 0 | 2 | 0 | 6 | 6 |                    |   |
|   |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5                  |   |
|   |  | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7                  |   |
|   |  | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1                  |   |
|   |  | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  |   |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Fibrosis                          |   |   |   | 2 |   |   |   |   | 2 | 2 | 4 |   |   | 2 | 2 | 4 |   |   | 4 |   |   |   |   |   |   |  |
| Infiltration Cellular, Lymphocyte | 1 | 1 | 2 |   | 1 |   | 1 |   | 1 | 1 | 4 | 1 |   |   | 1 | 4 | 1 |   | 4 |   |   |   |   | 1 |   |  |
| Inflammation, Suppurative         |   |   | 2 |   |   |   | 1 |   | 1 |   | 4 |   |   |   |   | 1 |   |   | 4 |   |   |   |   | 1 |   |  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |  |
| Mineralization                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |  |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epithelium, Hyperplasia           |   | 2 |   | 3 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Seminal Vesicle                   | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |  |
| Atrophy                           |   |   | 3 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 3 |   |   | 3 |   |   |   |  |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |  |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |  |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   | 3 |   | 3 |   |   |   |   |   | 4 |   |   |   |   |   |   |  |
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Granuloma                         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Polyarteritis                     |   | 2 | 2 |   |   |   | 3 |   |   |   |   | 2 | 2 |   |   |   |   |   | 3 |   |   |   |   | 2 |   |  |
| Seminiferous Tubule, Degeneration | 4 |   | 2 |   |   |   | 4 | 3 | 1 | 1 | 1 | 2 |   |   | 1 | 2 | 1 | 4 | 2 | 1 | 3 |   | 4 | 1 |   |  |

HEMATOPOIETIC SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                              |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Myeloid Cell, Hyperplasia                    |   |   |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                   |   |   | + |   |   |   | + |   | + |   |   |   | + |   |   |   |   | + |   | + | + |   |   |   |   |
| Axillary, Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  | ANIMAL ID | males<br>(cont...) |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|-----------|--------------------|
|   | 0675        | 0772 | 0039 | 0072 | 0077 | 0044 | 0077 | 0066 | 0066 | 0077 | 0055 | 0066 | 0077 | 0066 | 0055 | 0066 | 0077 | 0077 | 0066 | 0044 | 0033 | 0077 | 0055 | 0055 |  |           |                    |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 5    | 5    | 5    | 5    | 5    |  |           |                    |
|   | 3           | 3    | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 6    | 6    | 7    | 7    | 7    |  |           |                    |
|   | 7           | 7    | 8    | 8    | 9    | 9    | 0    | 0    | 1    | 1    | 3    | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    |  |           |                    |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    |  |           |                    |
| Lumbar, Degeneration, Cystic                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      | 2    |      |      | 4    |      |      |  |           |                    |
| Lumbar, Hyperplasia, Lymphoid                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |  |           |                    |
| Lumbar, Infiltration Cellular, Plasma Cell            |             |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      | 3    |      |      |      |      |      |  |           |                    |
| Mediastinal, Degeneration, Cystic                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Mediastinal, Hemorrhage                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Mediastinal, Hyperplasia, Lymphoid                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |  |           |                    |
| Mediastinal, Infiltration Cellular, Mast Cell         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |  |           |                    |
| Mediastinal, Infiltration Cellular, Polymorphonuclear |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Renal, Degeneration, Cystic                           |             |      |      |      |      |      |      |      | 4    |      | 3    |      |      | 4    |      |      |      |      |      | 4    |      | 4    |      |      |  |           |                    |
| Renal, Hyperplasia, Lymphoid                          |             |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Renal, Infiltration Cellular, Plasma Cell             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |  |           |                    |
| Lymph Node, Mandibular                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Degeneration, Cystic                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Hyperplasia, Lymphoid                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Infiltration Cellular, Plasma Cell                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Lymph Node, Mesenteric                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Degeneration, Cystic                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Infiltration Cellular, Polymorphonuclear              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Spleen  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Hematopoietic Cell Proliferation                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Hyperplasia, Lymphoid                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Necrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Pigmentation  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |
| Polyarteritis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |           |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
|   | 0675        | 0727 | 0392 | 0778 | 0776 | 0474 | 0776 | 0662 | 0661 | 0771 | 0552 | 0667 | 0772 | 0667 | 0551 | 0663 | 0772 | 0772 | 0667 | 0474 | 0390 | 0773 | 0556 | 0665 |                    |
| ANIMAL ID   | 0137        | 0133 | 0133 | 0133 | 0133 | 0134 | 0134 | 0134 | 0134 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 | 0135 |                    |
| Thymus Atrophy Cyst                                   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                    |
|   | 4           | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    |                    |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Galactocele          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Alveolus, Degeneration             | 4 | 4 |   | 4 | 3 |   |   | 3 |   | 4 |   | 2 |   | 3 | 3 | 2 | 4 | 4 | 4 |   |   | 2 | 4 |
| Alveolus, Dilatation               |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Duct, Dilatation                   |   | 1 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Skin Abscess                       | + |   |   | + |   |   |   |   |   | + |   | + |   | + |   |   |   |   | + | + | + |   | + |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |
| Fibrosis                           | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Inflammation, Chronic Active       | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                           | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                              | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |
| Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Foot, Fibrosis                     |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |
| Foot, Inflammation, Chronic Active |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |
| Foot, Necrosis                     |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Ulcer                        |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |

**MUSCULOSKELETAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID |  | males<br>(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--|--------------------|
|   | 6           | 7 | 3 | 7 | 7 | 4 | 7 | 6 | 6 | 7 | 5 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | 3 | 7 | 5 | 5 |           |  |                    |
|   | 7           | 2 | 9 | 2 | 2 | 3 | 2 | 2 | 5 | 2 | 5 | 7 | 2 | 7 | 1 | 3 | 2 | 2 | 2 | 7 | 8 | 5 | 3 | 7 | 5 | 1         |  |                    |
|   | 5           | 7 | 6 | 8 | 7 | 6 | 8 | 0 | 1 | 7 | 9 | 2 | 8 | 7 | 8 | 8 | 6 | 7 | 7 | 0 | 2 | 0 | 0 | 6 | 5 | 3         |  |                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1         |  |                    |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 3         |  |                    |
|   | 3           | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 |           |  |                    |
|   | 7           | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 |           |  |                    |
|   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |           |  |                    |

Bone, Femur  
Fibrous Osteodystrophy

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Skeletal Muscle

+

**NERVOUS SYSTEM**

Brain, Brain Stem  
Compression  
Hemorrhage

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | 2 | 2 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Brain, Cerebellum

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|

Brain, Cerebrum  
Ventricle, Dilatation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 | 1 | 2 |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|

**RESPIRATORY SYSTEM**

Lung  
Fibrosis  
Foreign Body  
Hemorrhage  
Infiltration Cellular, Histiocyte  
Inflammation, Granulomatous  
Inflammation, Chronic  
Inflammation, Chronic Active  
Metaplasia, Osseous  
Alveolar Epithelium, Hyperplasia

|   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |   |   |   |  |   |   |  |  |  |  |
|---|---|--|---|---|--|---|---|---|---|---|---|---|---|---|--|---|--|--|--|--|---|---|---|--|---|---|--|--|--|--|
| + | + |  |   | + |  | + | + | + | + |   |   | + | + | + |  |   |  |  |  |  | + | + | + |  | + | + |  |  |  |  |
| X |   |  |   |   |  | X |   |   |   |   |   |   |   |   |  |   |  |  |  |  | X | X |   |  |   |   |  |  |  |  |
|   |   |  | 4 |   |  | 3 |   |   |   | 3 |   |   |   |   |  | 1 |  |  |  |  |   | 2 |   |  |   |   |  |  |  |  |
| 2 |   |  |   |   |  | 3 |   |   |   |   |   |   |   |   |  |   |  |  |  |  | 4 |   |   |  |   |   |  |  |  |  |
|   |   |  |   |   |  |   |   |   |   |   |   | 4 |   |   |  |   |  |  |  |  |   |   |   |  |   |   |  |  |  |  |
|   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |   |   | 3 |  |   |   |  |  |  |  |
|   |   |  |   |   |  |   |   |   |   |   | 3 | 4 |   |   |  |   |  |  |  |  |   |   |   |  |   |   |  |  |  |  |

Nose

|   |   |  |  |   |  |   |   |  |  |   |   |  |  |   |   |   |  |  |  |  |  |   |   |   |  |   |   |  |  |  |  |
|---|---|--|--|---|--|---|---|--|--|---|---|--|--|---|---|---|--|--|--|--|--|---|---|---|--|---|---|--|--|--|--|
| + | + |  |  | + |  | + | + |  |  | + | + |  |  | + | + | + |  |  |  |  |  | + | + | + |  | + | + |  |  |  |  |
|---|---|--|--|---|--|---|---|--|--|---|---|--|--|---|---|---|--|--|--|--|--|---|---|---|--|---|---|--|--|--|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | ANIMAL ID   | 6 | 7 | 3 | 7 | 7 | 4 | 7 | 6 | 6 | 7 | 5 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 4 | 3 | 7 | 5 | 5 | 7 | 7 | 8 | 3 | 7 | 5 | 5 | 5 | 5 |   |
|   |             | 7 | 2 | 9 | 2 | 2 | 3 | 2 | 2 | 5 | 2 | 5 | 7 | 2 | 7 | 1 | 3 | 2 | 2 | 2 | 7 | 8 | 5 | 3 | 7 | 5 | 7 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 |   |
|   |             | 5 | 7 | 6 | 8 | 7 | 6 | 8 | 0 | 1 | 7 | 9 | 2 | 8 | 7 | 8 | 8 | 6 | 7 | 7 | 0 | 2 | 0 | 0 | 6 | 6 | 7 | 7 | 0 | 1 | 2 | 2 | 1 | 2 | 1 |   |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|   |             | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|   |             | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|   |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |

males  
(cont...)

|  |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
|--|---|---|--|---|--|--|---|---|---|--|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|--|---|--|---|--|---|--|---|--|--|
| Autolysis  |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Cyst Epithelial Inclusion                              |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Fibrous Osteodystrophy                                 |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   | 3 |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Foreign Body   |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Inflammation, Suppurative                              |   |   |  |   |  |  |   |   |   |  |   |   |   | 2 |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Inflammation, Chronic Active                           |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Epithelium, Upper Molar, Hyperplasia                   |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    | 2 |   |  |   |  |  |   |   | 2 |  |   | 2 | 3 |   |   | 3 |   |  |   | 3 |   | 2 |   | 2 | 1 |   |   |  |   |  |   |  |   |  |   |  |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |   |   |  |   |  |  |   | 2 |   |  |   |   | 2 |   |   |   |   |  |   |   |   |   |   |   | 2 | 2 |   |  |   |  |   |  |   |  |   |  |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   | 2 |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Upper Molar, Inflammation, Suppurative                 |   |   |  |   |  |  |   |   |   |  |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |  |   |  |   |  |   |  |  |
| Trachea  |   | + |  | + |  |  | + |   | A |  | + |   | A |   | + |   | A |  | + |   | + |   | + |   | + |   | + |  | + |  | + |  | + |  | + |  |  |

**SPECIAL SENSES SYSTEM**

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Eye                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Cataract                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| Retina, Degeneration      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| Lacrimal Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Zymbal's Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Fibrosis                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST | 0675 | 0727 | 0396 | 0728 | 0776 | 0438 | 0720 | 0661 | 0767 | 0529 | 0672 | 0767 | 0658 | 0568 | 0726 | 0777 | 0670 | 0442 | 0350 | 0730 | 0575 | 0556 | males<br>(cont...) |
|   | ANIMAL ID   | 0137 | 0138 | 0139 | 0140 | 0141 | 0142 | 0143 | 0144 | 0145 | 0146 | 0147 | 0148 | 0149 | 0150 | 0151 | 0152 | 0153 | 0154 | 0155 | 0156 | 0157 | 0158 |                    |

Duct, Dilatation

4

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Necrosis                                 |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Nephropathy                              | 4 | 4 | 4 | 2 | 2 | 1 | 4 | 1 | 4 | 4 | 2 | 4 | 3 |   | 2 | 1 | 2 | 4 | 3 | 4 | 2 | 4 | 2 | 3 |
| Polycystic Kidney                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |
| Cortex, Cyst                             | X |   |   | X |   |   | X |   |   |   | X |   |   |   |   |   | X |   | X |   |   |   |   |   |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Cyst                       |   |   |   |   | X |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |
| Renal Tubule, Hyperplasia, Atypical      |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Transitional Epithelium, Hyperplasia     |   |   | 3 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0560 | 0660 | 0660 | 0577 | 0725 | 0725 | 0628 | 0556 | 0699 | 0699 | 0728 | 0661 | 0569 |          | 0646 | 0696 |      |      |      |      |
| ANIMAL ID   | 0571        | 0572 | 0573 | 0573 | 0573 | 0576 | 0576 | 0576 | 0576 | 0576 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0579 | 0579     | 0579 | 0579 | 0579 | 0579 | 0579 | 0579 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0    | 0    | 0    |
|   | 5           | 7    | 7    | 6    | 5    | 7    | 4    | 5    | 6    | 6    | 5    | 7    | 7    | 6    | 5    | 5    | 6    | 7    | 6    | 5    | 6        | 4    | 6    | 4    | 6    | 4    | 6    |
|   | 9           | 2    | 2    | 8    | 3    | 2    | 5    | 9    | 6    | 8    | 1    | 2    | 2    | 2    | 8    | 9    | 9    | 2    | 6    | 7    | 0        | 2    | 9    | 2    | 9    | 9    | 6    |
|   | 6           | 5    | 6    | 3    | 0    | 6    | 0    | 0    | 6    | 0    | 7    | 5    | 5    | 8    | 5    | 6    | 7    | 8    | 1    | 5    | 9        | 6    | 6    | 6    | 6    | 6    | 6    |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0    | 0    | 0    |
|   | 5           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 9        | 9    | 9    | 9    | 9    | 9    | 9    |
|   | 7           | 7    | 7    | 7    | 7    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 4    | 4        | 4    | 4    | 4    | 4    | 4    | 4    |
|   | 1           | 2    | 2    | 3    | 3    | 3    | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 9    | 9    | 7    | 7    | 8    | 8    | 8        | 8    | 9    | 9    | 9    | 9    | 9    |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2        | 1    | 2    | 1    | 2    | 1    | 2    |

**ALIMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |     |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|--|
| Esophagus Dilatation                         | + |   |   | + | + |   |   | + | + | + | + | + |   |   | + | + | + | + |   | + | + | + | + | + |   |   | 32 | 1  | 4.0 |     |  |
| Intestine Large, Cecum Hyperplasia, Lymphoid |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 1   | 2.0 |  |
| Intestine Large, Colon                       | A |   |   | + | + |   |   | + | + | + | + | + |   |   | + | + | A | + |   | A | + | + | A | + |   |   |    | 26 |     |     |  |
| Intestine Small, Duodenum                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   |     |  |
| Intestine Small, Ileum                       | A |   |   | A | + |   |   | + | + | + | + | + |   |   | + | + | A | A |   | A | + | + | A | + |   |   |    | 22 |     |     |  |
| Intestine Small, Jejunum                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 3   |     |  |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 48 |     |     |  |
| Angiectasis                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 4   | 2.0 |  |
| Basophilic Focus                             |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 4   |     |  |
| Clear Cell Focus                             |   |   |   | X |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   | X |   |   | X |   |   |   |    |    | 9   |     |  |
| Congestion                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   | 4.0 |  |
| Degeneration, Cystic                         | 1 | 1 |   |   |   | 1 |   | 2 |   | 1 | 1 | 1 |   |   |   |   |   |   | 4 |   | 2 |   | 1 |   |   | 1 |    | 24 | 1.5 |     |  |
| Eosinophilic Focus                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   |     |  |
| Fatty Change                                 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 2   | 4.0 |  |
| Fibrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   | 4.0 |  |
| Hematopoietic Cell Proliferation             |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 2   | 1.5 |  |
| Hepatodiaphragmatic Nodule                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 3   |     |  |
| Infiltration Cellular, Mononuclear Cell      | 2 | 1 | 1 | 2 | 2 | 1 | 1 |   | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |   |   | 1 |   | 1 | 2 |   |   | 1 |   |    | 40 | 1.3 |     |  |
| Inflammation, Chronic Active                 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   | 2.0 |  |
| Polyarteritis                                |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1   | 1.0 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |        |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|--------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0560 | 0660 | 0660 | 0680 | 0517 | 0725 | 0628 | 0555 | 0667 | 0762 | 0661 | 0565 | 0649 |          | 0626 | 0429 | 0626 |        |
| ANIMAL ID   | 0571        | 0572 | 0573 | 0577 | 0576 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0994 | 0994 | 0994     | 0994 | 0994 | 0994 | 0994   |
| Tension Lipidosis                                     |             |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 2.5  |
| Vacuolization Cytoplasmic                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 2    |          |      |      |      | 9 1.9  |
| Bile Duct, Hyperplasia                                | 2           | 1    |      | 2    | 2    | 2    | 1    |      | 2    |      | 2    |      | 3    |      | 3    |      | 1    | 4    |      | 2    |          |      |      |      | 20 1.9 |
| Biliary Tract, Fibrosis                               |             | 1    | 2    |      |      | 2    |      | 1    | 2    | 1    | 2    |      | 2    |      | 1    |      |      |      |      |      |          |      |      |      | 19 1.4 |
| Hepatocyte, Necrosis                                  |             |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 1.5  |
| Hepatocyte, Regeneration                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |          |      |      |      | 1 4.0  |
| Oval Cell, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |          |      |      |      | 1 4.0  |
| Mesentery   |             |      |      |      |      |      |      |      | +    |      |      |      |      |      | M    |      |      |      |      |      |          |      |      |      | 2      |
| Fat, Hemorrhage                                       |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0  |
| Fat, Inflammation, Chronic                            |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0  |
| Fat, Necrosis   |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 4.0  |
| Pancreas  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +        | +    | +    |      | 46     |
| Basophilic Focus                                      |             |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1      |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0  |
| Infiltration Cellular, Lymphocyte                     | 3           | 3    | 2    | 1    | 1    |      | 2    |      | 2    | 2    | 2    | 3    | 2    | 2    | 2    |      |      |      | 1    |      | 2        |      | 2    |      | 35 1.8 |
| Lipomatosis   |             |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 9 3.0  |
| Pigmentation  | 2           | 2    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |      |      | 2    | 1    |      |      | 1    |      | 2    | 1        |      |      |      | 33 1.3 |
| Polyarteritis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0  |
| Acinar Cell, Hyperplasia                              |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 3.5  |
| Acinus, Degeneration                                  | 4           | 4    | 3    | 2    | 2    |      | 3    |      | 3    | 2    | 2    | 3    | 2    | 2    | 2    |      |      |      | 1    |      | 3        |      | 3    |      | 38 2.5 |
| Stomach, Forestomach                                  | +           |      |      | +    | +    |      | +    | +    | +    | +    | +    |      |      |      | +    | +    | +    | +    |      | +    | +        | +    | +    |      | 33     |
| Cyst Epithelial Inclusion                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1      |
| Fibrosis  |             |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0  |
| Inflammation, Chronic Active                          |             |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 3.0  |
| Perforation   |             |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1      |
| Ulcer   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |   |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|---|
|   | 0596        | 0725  | 0726  | 0683  | 0530  | 0726  | 0450  | 0560  | 0660  | 0660  | 0577  | 0775  | 0622  | 0525  | 0688  | 0599  | 0699  | 0728  | 0661  | 0569  |          | 0646  | 0696  |   |
| ANIMAL ID   | 05712       | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712 | 05711 | 05712    | 05711 | 05712 |   |
| Epithelium, Hyperplasia                               |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |   |
| Stomach, Glandular Mineralization                     | +           |       |       | +     | +     |       |       | +     | +     | +     | +     | +     |       |       | +     | +     | A     | +     |       | +     | +        | +     | A     | + |
|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |   |

CARDIOVASCULAR SYSTEM

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Heart                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy              | 4 | 2 | 3 | 1 |   | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 4 | 1 |   | 2 | 3 | 2 | 2 |
| Metaplasia, Osseous         | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thrombosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis               |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Congestion                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |
| Degeneration, Cystic      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia               | 2 |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hypertrophy               |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Osseous       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic |   |   |   | 2 |   |   |   | 3 |   |   | 2 | 2 | 2 |   | 2 |   |   |   |   |   |   | 1 |   |
| Adrenal Medulla           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia               |   |   |   |   |   |   |   | 1 | 2 |   |   |   | 1 |   |   |   |   |   |   | 2 |   | 1 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |        |       |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|--------|-------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0596 | 0660 | 0660 | 0577 | 0727 | 0727 | 0622 | 0622 | 0588 | 0599 | 0699 | 0728 | 0661 |          | 0565 | 0667 | 0402 | 0629 | 0666   |       |
| ANIMAL ID   | 0571        | 0572 | 0573 | 0574 | 0575 | 0776 | 0777 | 0778 | 0779 | 0770 | 0771 | 0772 | 0773 | 0774 | 0775 | 0776 | 0777 | 0778 | 0999 | 0999 | 0999     | 0999 | 0999 | 0999 | 0999 | 0999   |       |
| Islets, Pancreatic Hemorrhage                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +    | 47     |       |
|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 1 4.0  |       |
| Parathyroid Gland Hyperplasia                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +    | 46     |       |
|   |             |      | 2    |      | 2    |      |      | 4    |      |      | 2    | 2    |      |      |      |      |      |      | 2    |      |          |      |      | 2    |      | 17 2.5 |       |
| Pituitary Gland Angiectasis                           | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +    | 48     |       |
| Mineralization  |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 6 3.7  |       |
| Pars Distalis, Cyst                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 1 2.0  |       |
| Pars Distalis, Cyst Multilocular                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 6      |       |
| Pars Distalis, Hyperplasia                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 2      |       |
| Pars Distalis, Hypertrophy                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 16 2.2 |       |
| Pars Intermedia, Cyst                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 2 2.5  |       |
| Thyroid Gland Ultimobranchial Cyst                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 3      |       |
| C-cell, Hyperplasia                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 18 1.6 |       |
| Follicular Cell, Hyperplasia                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      | 6 2.7  |       |
| <b>GENERAL BODY SYSTEM</b>                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |        |       |
| Tissue NOS  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |        | 1     |
| <b>GENITAL SYSTEM</b>                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |        |       |
| Bulbourethral Gland Dilatation                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |        | 1     |
|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |        | 1 4.0 |
| Coagulating Gland                                     | A           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A        | +    | +    | +    | +    | 45     |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |        |       |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|--------|-------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0590 | 0660 | 0660 | 0577 | 0775 | 0775 | 0688 | 0558 | 0556 | 0699 | 0728 | 0661 | 0565 |          | 0649 | 0426 | 0696   |       |
| ANIMAL ID   | 0571        | 0577 | 0577 | 0577 | 0577 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0776 | 0974 | 0974 | 0974 | 0974     | 0974 | 0974 | 0974   |       |
| Atrophy   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 3.0  |       |
| Cyst, Mucinous  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |        | 1     |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |        | 1 4.0 |
| Inflammation, Chronic                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |        | 1 2.0 |
| Epididymis  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | 48     |       |
| Exfoliated Germ Cell                                  |             |      |      |      | 2    |      |      | 2    |      | 1    |      | 1    |      |      |      |      | 3    | 1    | 3    |      |          |      |      | 15 1.9 |       |
| Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 2.0  |       |
| Hypospermia   |             |      |      |      |      | 4    |      |      |      |      | 4    |      | 4    |      |      | 3    |      | 3    | 4    |      |          |      |      | 10 3.8 |       |
| Infiltration Cellular, Lymphocyte                     | 1           |      | 1    |      |      |      |      |      |      |      | 1    |      | 1    |      |      | 1    |      | 2    |      |      | 1        |      | 1    | 16 1.2 |       |
| Inflammation, Suppurative                             |             |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 2.0  |       |
| Polyarteritis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 1.0  |       |
| Epithelium, Degeneration                              |             |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 4.0  |       |
| Epithelium, Hyperplasia                               |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 4.0  |       |
| Mesothelium, Hyperplasia                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1 3.0  |       |
| Preputial Gland                                       |             |      |      |      |      | +    |      |      | +    | +    |      | +    |      |      |      | +    |      | +    |      | +    | +        |      | 16   |        |       |
| Hyperkeratosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |          | 4    |      | 3 4.0  |       |
| Inflammation, Suppurative                             |             |      |      |      |      | 3    |      |      | 4    | 3    |      |      |      |      |      |      | 4    | 4    |      | 3    | 4        |      |      | 13 3.7 |       |
| Duct, Dilatation                                      |             |      |      |      |      | 2    |      |      | 4    | 3    |      |      | 2    |      |      | 4    | 4    |      | 4    | 4    |          |      |      | 15 3.4 |       |
| Epithelium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |          |      |      | 1 3.0  |       |
| Prostate, Dorsal/lateral Lobe                         | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 48   |        |       |
| Cyst, Mucinous  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 2      |       |
| Fibrosis  |             |      |      |      |      |      |      |      | 4    |      |      | 2    |      |      |      |      |      |      |      |      |          |      | 2    | 8 2.8  |       |
| Infiltration Cellular, Lymphocyte                     |             |      | 1    | 1    | 2    | 1    | 1    | 1    | 3    | 1    | 1    | 1    |      | 1    | 1    | 1    |      | 1    | 2    |      |          |      |      | 30 1.6 |       |
| Inflammation, Suppurative                             |             |      | 2    | 2    | 2    | 2    | 2    | 2    | 4    | 3    | 2    | 2    | 2    | 2    | 2    | 1    | 2    | 1    | 3    | 3    | 1        | 1    | 2    | 46 2.0 |       |
| Prostate, Ventral Lobe                                | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 47   |        |       |
| Atrophy   |             |      |      |      | 3    | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 3 3.0  |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M           | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |          |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|----------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0596 | 0666 | 0660 | 0657 | 0725 | 0725 | 0622 | 0622 | 0858 | 0599 | 0699 | 0728 | 0661 |          | 0565 | 0667 | 0400 | 0622     |
| ANIMAL ID   | 0571        | 0577 | 0577 | 0577 | 0576 | 0776 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0944 | 0944 | 0944     | 0944 | 0944 | 0944 | 0944     |
| Lumbar, Degeneration, Cystic                                    |             |      |      |      |      |      |      |      | 3    |      |      | 4    |      |      |      |      |      |      | 4    |      |          | 4    |      |      | 7 3.6    |
| Lumbar, Hyperplasia, Lymphoid                                   |             |      |      |      |      |      |      |      | 4    | 4    |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 3 3.7    |
| Lumbar, Infiltration Cellular, Plasma Cell                      |             |      |      |      |      |      |      |      | 4    | 4    |      |      |      |      |      |      |      |      |      |      |          |      | 4    |      | 5 3.8    |
| Mediastinal, Degeneration, Cystic                               |             |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 2.0    |
| Mediastinal, Hemorrhage   |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Mediastinal, Hyperplasia, Lymphoid                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 3.0    |
| Mediastinal, Infiltration Cellular, Mast Cell                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 2.0    |
| Mediastinal, Infiltration Cellular, Polymorphonuclear           |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Renal, Degeneration, Cystic                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    | 2    | 4    |      |      |          |      | 4    |      | 9 3.6    |
| Renal, Hyperplasia, Lymphoid                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |          |      |      |      | 2 2.5    |
| Renal, Infiltration Cellular, Plasma Cell                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Lymph Node, Mandibular Degeneration, Cystic                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 8 5 3.4  |
| Lymph Node, Mandibular Hyperplasia, Lymphoid                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 5 3.2    |
| Lymph Node, Mandibular Infiltration Cellular, Plasma Cell       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 7 3.9    |
| Lymph Node, Mesenteric Degeneration, Cystic                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 1 4.0  |
| Lymph Node, Mesenteric Fibrosis                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Lymph Node, Mesenteric Infiltration Cellular, Polymorphonuclear |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Spleen Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 47 1 4.0 |
| Spleen Hematopoietic Cell Proliferation                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 17 2.6   |
| Spleen Hyperplasia, Lymphoid                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 2 3.5    |
| Spleen Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 4.0    |
| Spleen Pigmentation   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 25 2.0   |
| Spleen Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1 2.0    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |      |
|---|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|------|
|   | 0596        | 0725   | 0726   | 0683   | 0530   | 0726   | 0450   | 0560   | 0660   | 0660   | 0577   | 0725   | 0725   | 0628   | 0556   | 0567   | 0678   | 0661   | 0579   | 0649   |          | 0666 |
| ANIMAL ID   | 057122      | 057771 | 057772 | 057773 | 057774 | 057775 | 057776 | 057777 | 057778 | 057779 | 057780 | 057781 | 057782 | 057783 | 057784 | 057785 | 057786 | 057787 | 057788 | 057789 | 057790   |      |
| Thymus  | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | 48   |
| Atrophy   | 4           | 4      | 3      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 4        | 45   |
| Cyst  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          | 4.0  |
|   |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          | 1    |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48  |
| Galactocele                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Alveolus, Degeneration             |   |   | 3 |   |   | 3 |   | 2 | 3 | 4 | 4 |   |   |   |   |   | 3 |   | 4 | 4 | 4 | 25  |
| Alveolus, Dilatation               |   |   |   | 2 | 4 |   |   |   |   |   |   |   | 2 | 4 |   | 2 |   |   |   |   |   | 7   |
| Duct, Dilatation                   |   |   |   | 3 | 4 |   |   |   |   |   | 2 |   |   |   | 3 | 4 | 2 |   |   |   |   | 9   |
|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2.7 |
|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2.7 |
| Skin                               | + |   |   |   |   |   |   |   | + | + | + | + | + |   |   |   | + |   | + | + |   | 18  |
| Abscess                            |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Cyst Epithelial Inclusion          |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | 4.0 |
| Fibrosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3   |
| Inflammation, Suppurative          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4.0 |
| Necrosis                           |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 1   |
| Ulcer                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3.0 |
| Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   | 2   |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   | 4.0 |
| Foot, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   | 4   |
| Foot, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   | 5   |
| Foot, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   | 4.0 |
| Foot, Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   | 4   |
|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4.0 |

MUSCULOSKELETAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|
|   | 0596        | 0725 | 0726 | 0683 | 0530 | 0726 | 0450 | 0590 | 0660 | 0660 | 0577 | 0725 | 0628 | 0555 | 0699 | 0678 | 0661 | 0575 | 0609 | 0426 |          | 0606 |      |      |      |
| ANIMAL ID   | 0571        | 0577 | 0577 | 0573 | 0533 | 0763 | 0763 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0766 | 0944 | 0944 | 0944     | 0944 | 0944 | 0944 | 0944 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    | 0    |      |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Bone, Femur<br>Fibrous Osteodystrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 1 | 4.0 |
| Skeletal Muscle                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |    |   |     |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Brain, Brain Stem<br>Compression<br>Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 10  | 2.7 |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |     |
| Brain, Cerebellum                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |     |
| Brain, Cerebrum<br>Ventricle, Dilatation       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 7   | 1.6 |

RESPIRATORY SYSTEM

|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    |   |     |
|--|---|--|---|---|--|---|---|---|---|---|--|--|---|---|---|---|--|---|---|---|---|---|---|----|---|-----|
| Lung<br>Fibrosis<br>Foreign Body<br>Hemorrhage<br>Infiltration Cellular, Histiocyte<br>Inflammation, Granulomatous<br>Inflammation, Chronic<br>Inflammation, Chronic Active<br>Metaplasia, Osseous<br>Alveolar Epithelium, Hyperplasia | + |  | + | + |  | + | + | + | + | + |  |  | + | + | + | + |  | + | + | + | + | + | + | 33 | 1 | 3.0 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 6 |     |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 1 | 2.0 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 9 | 2.3 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 6 | 2.3 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 2 | 3.5 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 1 | 3.0 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 2 | 1.0 |
|  |   |  |   |   |  |   |   |   |   |   |  |  |   |   |   |   |  |   |   |   |   |   |   |    | 3 | 3.0 |
| Nose   | + |  | + | + |  | + | + | + | + | + |  |  | + | + | + | + |  | + | + | + | + | + | + | 32 |   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |    |        |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----|--------|
|  | 0<br>5<br>9<br>6      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>6      | 0<br>6<br>8<br>3      | 0<br>5<br>3<br>0      | 0<br>7<br>2<br>6      | 0<br>4<br>5<br>0      | 0<br>5<br>9<br>0      | 0<br>6<br>6<br>6      | 0<br>6<br>8<br>0      | 0<br>5<br>1<br>7      | 0<br>7<br>2<br>5      | 0<br>6<br>2<br>8      | 0<br>5<br>5<br>5      | 0<br>6<br>9<br>6      | 0<br>7<br>2<br>7      | 0<br>6<br>6<br>1      | 0<br>5<br>7<br>5      | 0<br>6<br>0<br>9      | 0<br>4<br>2<br>6      |                       | 0<br>6<br>7<br>6      |    |        |
| ANIMAL ID  | 0<br>5<br>7<br>1<br>2 | 0<br>5<br>7<br>2<br>1 | 0<br>5<br>7<br>2<br>1 | 0<br>5<br>7<br>3<br>1 | 0<br>5<br>7<br>3<br>2 | 0<br>7<br>6<br>3<br>1 | 0<br>7<br>6<br>3<br>2 | 0<br>7<br>6<br>4<br>1 | 0<br>7<br>6<br>4<br>2 | 0<br>7<br>6<br>5<br>1 | 0<br>7<br>6<br>5<br>2 | 0<br>7<br>6<br>6<br>1 | 0<br>7<br>6<br>6<br>2 | 0<br>7<br>6<br>6<br>1 | 0<br>7<br>6<br>7<br>1 | 0<br>7<br>6<br>7<br>2 | 0<br>9<br>4<br>7<br>1 | 0<br>9<br>4<br>7<br>2 | 0<br>9<br>4<br>8<br>1 | 0<br>9<br>4<br>8<br>2 | 0<br>9<br>4<br>8<br>1 | 0<br>9<br>4<br>9<br>2 |    |        |
| Autolysis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |    | 1 4.0  |
| Cyst Epithelial Inclusion                              |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1      |
| Fibrous Osteodystrophy                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 3.0  |
| Foreign Body   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |    | 1      |
| Inflammation, Suppurative                              |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |    | 3 2.3  |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       | 3                     |                       |                       |    | 2 3.5  |
| Epithelium, Upper Molar, Hyperplasia                   |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 4.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |                       |                       |                       | 4                     |                       |                       | 2                     |                       | 3                     |                       |                       |                       |                       |                       | 4                     | 4                     |                       | 3                     |                       | 4                     | 4                     |                       | 3  | 18 2.8 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |                       |                       |                       | 1                     |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       | 4                     |                       | 2                     |                       |                       |                       |                       |                       |    | 8 2.1  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2                     |                       |                       |                       |                       |                       |                       |                       | 3                     | 2                     |                       |                       |    | 4 2.3  |
| Transitional Epithelium, Accumulation, Hyaline Droplet |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |    | 2 3.0  |
| Upper Molar, Inflammation, Suppurative                 |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 3.0  |
| Trachea  | A                     |                       | +                     | +                     |                       | +                     | +                     | +                     | +                     | +                     | +                     |                       | +                     | +                     | A                     | +                     |                       | +                     | +                     | +                     | A                     | +                     | 26 |        |
| <b>SPECIAL SENSES SYSTEM</b>                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    |        |
| Eye  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1      |
| Cataract   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 4.0  |
| Retina, Degeneration                                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 4.0  |
| Lacrimal Gland   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1      |
| Zymbal's Gland   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       |    | 2      |
| Fibrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 4.0  |
| Inflammation, Suppurative                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    | 1 4.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2.5 StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|   | 0596        | 0725  | 0726  | 0683  | 0530  | 0726  | 0450  | 0560  | 0660  | 0660  | 0577  | 0727  | 0727  | 0622  | 0622  | 0858  | 0599  | 0699  | 0728  | 0661  |          | 0569  | 0646  | 0429  |
| ANIMAL ID   | 05712       | 05721 | 05773 | 05771 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766 | 05766    | 05766 | 05766 | 05766 |

Duct, Dilatation 1 4.0

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |       |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-------|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |       |
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.5   |
| Hemorrhage                               |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 4.0   |
| Infiltration Cellular, Polymorphonuclear |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1 | 5  | 1.2 |       |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.5   |
| Necrosis                                 |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 4.0   |
| Nephropathy                              | 2 | 2 | 4 | 1 | 4 | 4 | 1 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | 1 | 4 | 1 | 3 | 4 | 4 |   | 4 | 45 | 3.0 |       |
| Polycystic Kidney                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0   |
| Cortex, Cyst                             | X |   |   | X |   | X | X |   |   | X |   |   |   |   |   | X |   | X |   |   |   |   | X | 14 |     |       |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0   |
| Renal Tubule, Cyst                       |   |   |   |   |   | X |   |   | X |   |   | X | X |   | X |   | X |   |   | X | X |   |   | 12 |     |       |
| Renal Tubule, Hyperplasia, Atypical      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0   |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   | 3 |   |   | 3 | 2 |   | 1 |   |   |   |   |   |   | 1 | 1 | 9  | 1.9 |       |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |       |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     | 1 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST | 0727  | 0405  | 0728  | 0668  | 0478  | 0672  | 0666  | 0763  | 0550  | 0725  | 0668  | 0565  | 0441  | 0390  | 0773  | 0667  | 0661  | 0729  | 0568  | 0700  | 0670  | 0665  | 0765  | 0665  | males<br>(cont...) |
|  | ANIMAL ID   | 01531 | 01532 | 01534 | 01532 | 01531 | 01531 | 01531 | 01531 | 01531 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01535 | 01535 | 01535 | 01535 | 01535 | 01535 |                    |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               |   |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon                  | A |   | + | + | A | + | + |   | + | + | A | + | A | + | + |   | + | + |   | A | + | A | + |   |   |
| Intestine Small, Ileum                  | A |   | + | + | A | + | + |   | + | + | A | + | A | + | + |   | + | + |   | A | + | A | + |   |   |
| Intestine Small, Jejunum                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Diverticulum                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphoid                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Osseous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 | 2 |
| Basophilic Focus                        |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   | X | X |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |
| Degeneration, Cystic                    | 2 |   |   | 2 | 1 | 1 | 1 |   | 1 |   |   | 4 |   | 1 |   |   |   | 2 | 2 |   |   |   |   | 2 |   |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Fatty Change                            |   |   |   | 2 |   |   |   |   |   |   |   | 1 |   |   |   |   | 3 |   |   | 4 |   |   | 1 |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 2 |   | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 |   | 1 |   |   | 1 | 2 | 2 | 2 | 1 |   | 1 | 1 |   |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic               | 2 | 2 |   | 2 |   |   | 1 | 1 | 1 |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   | 1 |   |   |
| Bile Duct, Hyperplasia                  | 2 |   | 1 | 3 |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   | 1 |   | 1 |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|
|   | 0727        | 0405 | 0728 | 0668 | 0478 | 0764 | 0663 | 0663 | 0750 | 0576 | 0766 | 0664 | 0669 | 0530 | 0665 | 0441 | 0399 | 0399 | 0711 | 0729 | 0681 | 0660 | 0726 | 0568 |           |                    | 0700 |
| Biliary Tract, Fibrosis<br>Capsule, Fibrosis<br>Hepatocyte, Necrosis<br>Oval Cell, Hyperplasia  | 1           |      | 1    | 2    |      | 1    |      | 1    |      | 1    | 1    |      |      |      |      |      |      |      |      |      | 1    |      |      |      |           |                    |      |
| Mesentery<br>Fat, Necrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Oral Mucosa   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Pancreas<br>Basophilic Focus<br>Fibrosis<br>Hemorrhage<br>Infiltration Cellular, Lymphocyte<br>Inflammation, Chronic Active<br>Lipomatosis<br>Pigmentation<br>Polyarteritis<br>Thrombosis<br>Acinus, Degeneration<br>Artery, Mineralization | +           | +    | +    | +    | +    | +    | +    | +    | +    | X    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    |
| Stomach, Forestomach<br>Cyst Epithelial Inclusion<br>Edema<br>Epithelium, Hyperplasia   | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Stomach, Glandular<br>Mineralization  |             | A    |      | +    | +    | +    | +    | +    |      | +    |      | +    | A    | +    | A    | +    | +    |      | +    | +    |      | +    | +    |      | +         | +                  | A    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST | 0727  | 0405  | 0728  | 0668  | 0478  | 0762  | 0664  | 0663  | 0793  | 0500  | 0725  | 0676  | 0664  | 0551  | 0449  | 0337  | 0772  | 0668  | 0660  | 0729  | 0568  | 0700  | 0676  | 0665  | 0666  | males<br>(cont...) |
|  | ANIMAL ID   | 01531 | 01532 | 01534 | 01535 | 01536 | 01537 | 01538 | 01539 | 01540 | 01541 | 01542 | 01543 | 01544 | 01545 | 01546 | 01547 | 01548 | 01549 | 01550 | 01551 | 01552 | 01553 | 01554 | 01555 | 01556 |                    |

Epithelium, Hyperplasia

CARDIOVASCULAR SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel Mineralization        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                    |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Heart                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy                     | 4 | 1 | 2 | 2 | 3 | 3 | 4 | 1 | 2 | 1 | 3 | 1 | 3 | 3 | 4 |   | 2 | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 2 |   |
| Metaplasia, Osseous Mineralization |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Thrombosis                         |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Degeneration, Cystic              |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Hyperplasia                       | 3 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Vacuolization Cytoplasmic         | 2 |   |   |   |   |   |   |   | 1 |   |   |   |   | 2 | 1 |   | 2 |   | 2 | 4 |   | 2 |   |   |   |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       |   |   |   | 2 | 4 | 2 | 2 |   | 3 |   | 2 | 3 | 2 |   |   |   | 2 |   | 2 |   |   |   |   |   | 2 | 3 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 25.0 StDose M</b> | DAY ON TEST | 0727  | 0405  | 0728  | 0668  | 0472  | 0664  | 0666  | 0773  | 0550  | 0775  | 0668  | 0666  | 0553  | 0440  | 0334  | 0771  | 0772  | 0668  | 0660  | 0772  | 0556  | 0770  | 0667  | 0665  | 0666  |
|   | ANIMAL ID   | 01531 | 01533 | 01534 | 01552 | 01555 | 01556 | 01557 | 01558 | 01566 | 01567 | 01571 | 01573 | 01577 | 01590 | 01591 | 01592 | 01599 | 01600 | 01601 | 01602 | 01603 | 01608 | 01612 | 01615 | 01618 |

males  
(cont...)

|                                  |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
|----------------------------------|---|---|---|---|-----|-----|---|---|---|---|---|---|---|-----|---|---|---|-----|---|---|---|---|---|---|---|---|-----|--|--|--|-----|--|--|--|
| Angiectasis                      | 4 |   |   |   | 4   |     |   |   | 4 |   |   |   | 4 |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Hemorrhage                       |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Pars Distalis, Cyst              | X |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   | X |   |   |   |   |     |  |  |  |     |  |  |  |
| Pars Distalis, Cyst Multilocular |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Pars Distalis, Hyperplasia       | 2 | 4 |   |   |     | 1 2 |   |   |   | 1 |   |   |   | 1 2 |   |   |   | 2 4 |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Pars Distalis, Hypertrophy       |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Pars Intermedia, Cyst            |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Thyroid Gland                    | + | + | + | + | +   | +   | + | + | + | + | + | A | + | A   | + | + | + | +   | + | + | + | + | + | + | + | A | +   |  |  |  |     |  |  |  |
| Ultimobranhial Cyst              | X |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   | X |   |   |   |     |  |  |  |     |  |  |  |
| C-cell, Hyperplasia              | 2 |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   | 2 |   |   |   |   | 4 1 |  |  |  | 2 1 |  |  |  |
| Follicle, Cyst                   |   |   |   |   |     |     |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |
| Follicular Cell, Hyperplasia     |   |   |   |   | 3 3 |     |   |   | 3 |   |   |   | 3 |     |   |   | 3 |     |   |   |   |   |   |   |   |   |     |  |  |  |     |  |  |  |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                   |     |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |
|-----------------------------------|-----|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|-----|---|---|---|-----|---|---|---|---|---|---|---|
| Coagulating Gland                 | +   | + | + | + | + | A | + | + | + | + | + | + | A   | + | + | + | +   | + | + | + | +   | + | + | A | + | + | + |   |
| Atrophy                           |     |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |
| Epididymis                        | +   | + | + | + | + | + | + | + | + | + | + | + | +   | + | + | + | +   | + | + | + | +   | + | + | + | + | + | + | + |
| Atrophy                           |     |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |
| Exfoliated Germ Cell              |     |   |   |   | 1 |   |   |   |   |   |   |   | 1   |   |   |   | 2   |   |   |   | 2 2 |   |   |   |   |   |   |   |
| Hypospermia                       | 4 4 |   | 3 |   |   |   | 4 |   |   |   | 4 |   |     |   | 4 |   |     |   | 4 |   |     |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |     |   |   |   | 2 |   |   |   |   |   |   |   | 1 1 |   |   |   | 1 1 |   |   |   |     |   |   |   |   |   |   |   |
| Polyarteritis                     |     |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |
| Spermatocele                      |     |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |     |   |   |   |     |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |       |       |       |       |       |       |       |  |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|  | 0727        | 0405  | 0708  | 0608  | 0408  | 0702  | 0604  | 0606  | 0606  | 0709  | 0503  | 0702  | 0607  | 0608  | 0501  | 0409  | 0304  | 0707  | 0606  | 0608  |                    | 0702  | 0508  | 0700  | 0607  | 0608  | 0708  | 0605  | 0606  |  |
| ANIMAL ID  | 01531       | 01532 | 01534 | 01532 | 01531 | 01531 | 01531 | 01531 | 01531 | 01531 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01533 | 01535              | 01535 | 01535 | 01535 | 01535 | 01535 | 01535 | 01537 | 01537 |  |
| Preputial Gland  |             |       | +     | +     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Abscess  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Hyperkeratosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Duct, Dilatation                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Prostate, Dorsal/lateral Lobe                          | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     |  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Cyst   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Cyst, Mucinous   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Infiltration Cellular, Lymphocyte                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Prostate, Ventral Lobe                                 | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     |  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Infiltration Cellular, Lymphocyte                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Epithelium, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Seminal Vesicle  | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | A     | +     | A     | +     | +     | +     | +     | +     | +                  | +     | A     | +     | A     | +     | +     | +     |       |  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Epithelium, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Lumen, Dilatation                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |       |       |       |       |       |       |       |       |  |
| Testes   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  | +     | +     | +     | +     | +     | +     | +     | +     |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |                  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
|  | 0<br>7<br>2<br>7      | 0<br>4<br>0<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>6<br>8      | 0<br>4<br>7<br>8      | 0<br>7<br>2<br>0      | 0<br>6<br>2<br>4      | 0<br>6<br>9<br>3      | 0<br>7<br>2<br>0      | 0<br>5<br>3<br>6      | 0<br>7<br>2<br>5      | 0<br>6<br>6<br>8      | 0<br>6<br>6<br>9      | 0<br>5<br>4<br>0      | 0<br>3<br>9<br>4      | 0<br>7<br>1<br>7      | 0<br>7<br>2<br>9      | 0<br>6<br>8<br>1      | 0<br>6<br>0<br>8      | 0<br>7<br>6<br>8      |                       |                       | 0<br>5<br>0<br>0      | 0<br>7<br>0<br>0      | 0<br>6<br>7<br>8      | 0<br>6<br>5<br>6 |
|  | 0<br>1<br>5<br>3<br>1 | 0<br>1<br>5<br>3<br>2 | 0<br>1<br>5<br>4<br>1 | 0<br>1<br>5<br>4<br>2 | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>6<br>1 | 0<br>1<br>5<br>6<br>2 | 0<br>1<br>5<br>7<br>1 | 0<br>1<br>5<br>7<br>2 | 0<br>3<br>6<br>9<br>1 | 0<br>3<br>6<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>2 | 0<br>5<br>8<br>3<br>1 | 0<br>5<br>8<br>3<br>2 | 0<br>5<br>8<br>6<br>1 | 0<br>5<br>8<br>6<br>2 | 0<br>5<br>6<br>6<br>1 | 0<br>5<br>6<br>6<br>2 |                  |
| Polyarteritis  |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 1                     |                       | 2                     |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 1                     | 4                     |                  |
| Seminiferous Tubule, Degeneration                      | 1                     | 4                     | 4                     | 1                     | 1                     | 4                     | 1                     | 4                     | 2                     | 4                     |                       | 4                     |                       |                       | 1                     |                       | 2                     | 1                     | 3                     | 1                     | 2                     | 1                     | 1                     | 1                     | 4                     |                  |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + |
| Hypocellularity                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |
| Myeloid Cell, Hyperplasia                        |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                       |   |   |   |   |   |   |   |   | + |   |   |   | + |   | + |   |   |   | + |   | + |   |   |   | + |
| Axillary, Hyperplasia, Lymphoid                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                     |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |
| Lumbar, Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                    |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell       |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hemorrhage                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Infiltration Cellular, Histiocyte   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Degeneration, Cystic                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Renal, Hemorrhage                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Renal, Infiltration Cellular, Plasma Cell        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Pigmentation                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                           |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                             |   |   |   |   |   |   |   |   |   |   |   | 4 | + |   |   |   |   |   |   |   | + | + | + |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M   | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |      |      |      |      |  |  |   |  |  |  |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|------|------|------|--|--|---|--|--|--|
|  | 0727        | 0405 | 0728 | 0668 | 0478 | 0720 | 0664 | 0663 | 0763 | 0550 | 0725 | 0668 | 0669 | 0551 | 0430 | 0390 | 0394 | 0717 | 0729 | 0661 |           |                    | 0668 | 0752 | 0578 | 0700 | 0678 | 0665 | 0756 |  |  |   |  |  |  |
| Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |           | 3                  | 4    |      |      |      |      |      |      |  |  |   |  |  |  |
|  | 3           |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |           | 4                  | 4    | 3    |      |      |      |      |      |  |  |   |  |  |  |
| Lymph Node, Mesenteric                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | +                  |      |      |      |      |      |      |      |  |  |   |  |  |  |
| Spleen   | +           | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    | +    | +    | +    |      |      |  |  |   |  |  |  |
| Hematopoietic Cell Proliferation                         |             |      |      |      | 2    | 4    |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |           |                    |      |      |      |      |      | 1    |      |  |  | 3 |  |  |  |
| Hyperplasia, Lymphoid                                    |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |           | 2                  |      |      |      |      |      |      |      |  |  |   |  |  |  |
| Pigmentation   | 2           |      | 2    |      | 1    |      |      |      |      |      |      |      |      |      |      |      | 1    | 3    | 2    |      | 2         | 1                  |      | 4    | 4    | 3    | 1    |      |      |  |  |   |  |  |  |
| Capsule, Fibrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 2                  |      |      |      |      |      |      |      |  |  |   |  |  |  |
| Thymus   | +           | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    | +    | +    | +    | +    |      |      |  |  |   |  |  |  |
| Atrophy  | 4           |      | 4    |      | 4    |      | 4    |      | 4    |      | 4    |      | 4    |      | 4    |      | 4    |      | 4    |      | 4         |                    | 4    |      | 4    |      | 4    |      |      |  |  |   |  |  |  |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Galactocele                  |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mineralization               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alveolus, Degeneration       | 4 |   | 3 |   | 4 |   | 3 |   | 4 |   | 2 |   | 3 |   | 3 |   | 3 |   | 4 |   | 3 |   | 4 |   | 4 |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alveolus, Dilatation         |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 3 |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skin                         | + | + |   |   |   |   |   |   |   |   |   |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X | X | X |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative    | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |   | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |
|--|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|
|  |   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 | 0 |   |
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b> | 7 | 4           | 7 | 6 | 4 | 7 | 6 | 6 | 7 | 5 | 7 | 6 | 6 | 5 | 4 | 3 | 7 | 7 | 6 | 6 | 7 | 5                  | 7 | 6 | 6 |
|  | 2 | 0           | 2 | 6 | 7 | 2 | 2 | 9 | 3 | 0 | 2 | 7 | 4 | 1 | 9 | 9 | 1 | 2 | 8 | 0 | 2 | 6                  | 0 | 7 | 5 |
| <b>F1 25.0 StDose M</b>                          | 7 | 5           | 8 | 8 | 8 | 0 | 4 | 3 | 0 | 6 | 5 | 8 | 9 | 3 | 0 | 4 | 7 | 9 | 1 | 8 | 8 | 9                  | 8 | 6 | 6 |
|  | 0 | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 |
|  |   | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5                  | 5 | 5 | 5 |
|  |   | 5           | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8                  | 8 | 8 | 8 |
|  |   | 3           | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5                  | 6 | 6 | 7 |
|  |   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 2 |

|                                    |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
|------------------------------------|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Ulcer                              | 3 |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
| Epithelium, Hyperplasia            | 4 |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   |  |
| Epithelium, Foot, Hyperplasia      |   |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| Foot, Edema                        |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  | 3 |  |
| Foot, Fibrosis                     |   |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| Foot, Inflammation, Chronic Active |   |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| Foot, Necrosis                     |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| Foot, Ulcer                        |   |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |

**MUSCULOSKELETAL SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vertebra, Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bone, Femur                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Osteodystrophy           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Osteopetrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Skeletal Muscle                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**NERVOUS SYSTEM**

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + |
| Compression       |   |   |   |   | 2 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3 | 1 |
| Hemorrhage        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|
|  | 0727        | 0405 | 0728 | 0668 | 0478 | 0760 | 0664 | 0663 | 0779 | 0530 | 0726 | 0667 | 0669 | 0541 | 0399 | 0394 | 0717 | 0729 | 0681 | 0660 | 0728 | 0568 | 0770 | 0667 |           |                    | 0756 |
| Brain, Cerebrum  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  |      |
| Gliosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Hemorrhage   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Ventricle, Dilatation                                  |             |      |      |      |      |      |      | 1    |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      | 2    |           | 1                  |      |
| Nerve Trigeminal                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +    |      |      |      |      |      |           |                    |      |
| Axon, Degeneration                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |           |                    |      |
| Peripheral Nerve, Sciatic                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +    |      |      |      |      |           |                    |      |
| Peripheral Nerve, Tibial                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +    |      |      |      |           |                    |      |
| Spinal Cord, Cervical                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +    |      |      |      |           |                    |      |
| Spinal Cord, Lumbar                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Axon, Degeneration                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Spinal Cord, Thoracic                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |
| Axon, Degeneration                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |

**RESPIRATORY SYSTEM**

|                                   |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
|-----------------------------------|--|---|--|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|--|---|---|--|---|---|---|---|--|--|
| Lung                              |  | + |  | + | + | + | + | + |  | + | + | + | + | + | + | + | + | + |  | + | + |  | + | + | + | + |  |  |
| Foreign Body                      |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Infiltration Cellular, Histiocyte |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Infiltration Cellular, Lymphocyte |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Inflammation, Suppurative         |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Inflammation, Granulomatous       |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Inflammation, Chronic Active      |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |
| Metaplasia, Osseous               |  |   |  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |   |   |   |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|--|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b>             | 0<br>7<br>2<br>7      | 0<br>4<br>0<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>6<br>8      | 0<br>4<br>7<br>8      | 0<br>7<br>2<br>0      | 0<br>6<br>2<br>4      | 0<br>6<br>9<br>3      | 0<br>7<br>3<br>0      | 0<br>5<br>2<br>6      | 0<br>7<br>7<br>5      | 0<br>6<br>4<br>9      | 0<br>6<br>6<br>3      | 0<br>5<br>1<br>0      | 0<br>4<br>9<br>4      | 0<br>3<br>7<br>4      | 0<br>7<br>1<br>7      | 0<br>7<br>2<br>9      | 0<br>6<br>8<br>1      | 0<br>6<br>0<br>8      | 0<br>7<br>2<br>9      | 0<br>5<br>6<br>8      | 0<br>7<br>0<br>0      | 0<br>6<br>7<br>8      | 0<br>6<br>5<br>6      |                            |                       |                       |  |
| <b>F1 25.0 StDose M</b>                                | ANIMAL ID             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>males<br/>(cont...)</b> |                       |                       |  |
|  | 0<br>1<br>5<br>3<br>1 | 0<br>1<br>5<br>3<br>2 | 0<br>1<br>5<br>4<br>1 | 0<br>1<br>5<br>4<br>2 | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>5<br>2 | 0<br>1<br>5<br>6<br>1 | 0<br>1<br>5<br>6<br>2 | 0<br>1<br>5<br>7<br>1 | 0<br>1<br>5<br>7<br>2 | 0<br>3<br>6<br>9<br>1 | 0<br>3<br>6<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>3<br>7<br>9<br>1 | 0<br>3<br>7<br>9<br>2 | 0<br>5<br>8<br>3<br>5 | 0<br>5<br>8<br>3<br>5 | 0<br>5<br>8<br>6<br>2 | 0<br>5<br>8<br>6<br>1 | 0<br>5<br>8<br>6<br>2 |                            | 0<br>5<br>8<br>6<br>1 | 0<br>5<br>8<br>6<br>2 |  |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
|  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Alveolar Epithelium, Hyperplasia                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Bronchiole, Epithelium, Hyperplasia                    |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                            |                       |                       |  |
| Subpleura, Cyst  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Nose   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     |                       |                            |                       |                       |  |
| Fibrous Osteodystrophy                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Foreign Body   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Inflammation, Suppurative                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    | 2                     | 3                     | 3                     | 4                     | 2                     | 2                     | 1                     |                       |                       |                       | 3                     |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       | 2                     | 3                     | 3                     |                       |                            |                       |                       |  |
| Posterior To Upper Incisor, Malformation               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  | 3                     | 2                     | 2                     | 2                     | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       | 2                     |                       |                            |                       |                       |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Transitional Epithelium, Accumulation, Hyaline Droplet |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Upper Molar, Inflammation, Suppurative                 |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Upper Molar, Keratin Cyst                              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Upper Molar, Necrosis                                  |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Trachea  | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     | A                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | A                     | +                     |                       |                            |                       |                       |  |
| Inflammation, Chronic Active                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |
| Epithelium, Hyperplasia                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                            |                       |                       |  |

**SPECIAL SENSES SYSTEM**

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|
| Eye                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |
| Cataract                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  | + |
| Fibrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  | 3 |
| Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M |  | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males<br>(cont...) |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
| ANIMAL ID  |  | 7           | 4 | 7 | 6 | 4 | 7 | 6 | 6 | 7 | 5 | 7 | 6 | 6 | 5 | 4 | 3 | 7 | 7 | 6 | 6 | 7 | 5 | 7 | 6 | 6 | 6 | 6 |                    |
|  |  | 2           | 0 | 2 | 6 | 7 | 2 | 2 | 9 | 3 | 0 | 2 | 7 | 4 | 1 | 9 | 9 | 1 | 2 | 8 | 0 | 2 | 6 | 0 | 7 | 6 | 5 | 6 |                    |

Cornea, Inflammation, Suppurative 4  
 Cornea, Necrosis 4  
 Cornea, Ulcer 4

Zymbal's Gland

URINARY SYSTEM

| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Accumulation, Hyaline Droplet            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Necrosis                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Nephropathy                              | 3 |   | 1 | 1 | 4 | 4 | 4 | 1 | 4 | 2 | 4 | 4 |   |   |   | 4 | 3 |   |   | 4 | 1 | 4 | 4 | 3 | 3 | 1 | 4 | 4 |
| Polyarteritis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Thrombosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cortex, Cyst                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Renal Tubule, Cyst                       | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Renal Tubule, Hyperplasia, Atypical      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                 |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 25.0 StDose M</b> | DAY ON TEST | 0639  | 0583  | 0553  | 0517  | 0535  | 0663  | 0669  | 0588  | 0725  | 0570  | 0740  | 0772  | 0778  | 0663  | 0775  | 0778  | 0672  | 0722  | 0728  | 0778  | 0778  | 0496            |       |
|   | ANIMAL ID   | 05872 | 05881 | 05882 | 05891 | 05892 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897 | 05897           | 05897 |
|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | <b>* TOTALS</b> |       |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 32 |
| Intestine Large, Cecum                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | 1  |
| Intestine Large, Colon                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A |   |   |   |   |   |   | + | 24 |
| Intestine Small, Ileum                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A |   |   |   |   |   |   | + | 24 |
| Intestine Small, Jejunum                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Diverticulum                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Hyperplasia, Lymphoid                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Metaplasia, Osseous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Angiectasis                             | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   |   | 8  |
| Basophilic Focus                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   | 5  |
| Clear Cell Focus                        | X |   |   |   |   |   |   |   |   | X | X | X |   |   |   |   |   |   | X |   | X | X |   | 11 |
| Degeneration, Cystic                    |   |   | 1 | 1 | 3 | 2 | 4 |   | 2 |   | 2 | 2 | 3 | 1 |   | 1 | 2 |   |   | 1 | 1 |   |   | 25 |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Fatty Change                            |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 7  |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Infiltration Cellular, Mononuclear Cell | 2 | 1 | 2 | 1 | 2 | 1 |   | 1 |   | 2 | 2 | 1 | 1 |   | 2 | 1 |   | 2 | 2 |   | 2 | 2 | 1 | 37 |
| Inflammation, Chronic Active            |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Mixed Cell Focus                        |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 2  |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Vacuolization Cytoplasmic               | 2 |   | 2 |   |   |   | 2 |   |   | 2 |   | 2 |   |   |   |   |   | 2 | 2 |   | 2 |   |   | 17 |
| Bile Duct, Hyperplasia                  |   |   | 2 |   | 3 |   | 1 | 1 |   | 2 |   | 2 |   | 2 |   |   |   | 2 | 2 | 3 | 1 | 1 |   | 19 |
| Biliary Tract, Cyst                     |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |     |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|-----|
|  | 0639        | 0583 | 0553 | 0517 | 0535 | 0673 | 0669 | 0588 | 0725 | 0540 | 0700 | 0728 | 0778 | 0778 | 0699 | 0775 | 0778 | 0683 | 0728 | 0729 |          |      | 0778 | 0727 | 0496 |     |
| ANIMAL ID  | 0587        | 0588 | 0588 | 0589 | 0591 | 0771 | 0772 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777     | 0777 | 0777 | 0777 |      |     |
| Biliary Tract, Fibrosis                                | 1           |      | 3    |      |      |      |      | 1    |      | 1    | 2    | 1    | 1    |      | 1    | 2    |      |      | 2    | 1    | 2        |      | 1    | 20   | 1.4  |     |
| Capsule, Fibrosis                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1    | 2.0  |     |
| Hepatocyte, Necrosis                                   |             |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |          |      |      | 3    | 3.0  |     |
| Oval Cell, Hyperplasia                                 |             |      | 2    |      |      |      |      |      |      | 1    |      |      |      |      |      | 1    |      |      |      |      |          |      |      | 5    | 1.4  |     |
| Mesentery  |             |      |      |      |      |      |      | +    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 3    |      |     |
| Fat, Necrosis  |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 3    | 4.0  |     |
| Oral Mucosa  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1    |      |     |
| Pancreas   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +        | +    | +    | 47   |      |     |
| Basophilic Focus                                       |             |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      | X    |      |      |      |          |      |      | 4    |      |     |
| Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |          |      |      | 1    | 3.0  |     |
| Hemorrhage   |             |      |      |      | 2    |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |          |      |      | 2    | 2.0  |     |
| Infiltration Cellular, Lymphocyte                      | 2           |      | 3    | 3    | 2    | 2    |      | 2    | 1    |      |      |      | 3    |      | 2    |      |      |      | 3    | 3    | 1        | 3    | 1    | 2    | 32   | 1.8 |
| Inflammation, Chronic Active                           |             | 4    |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      | 1    |      |          |      |      | 3    | 2.7  |     |
| Lipomatosis  |             |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      | 3    |      |      |      | 3        | 2    |      | 15   | 2.9  |     |
| Pigmentation   | 1           |      | 1    | 2    | 2    |      |      |      | 1    |      | 1    |      |      |      | 1    | 1    |      | 2    | 1    |      |          |      | 2    | 20   | 1.3  |     |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1    | 1.0  |     |
| Thrombosis   |             |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1    |      |     |
| Acinus, Degeneration                                   | 2           | 4    | 3    | 4    | 3    | 2    |      | 2    |      |      |      |      | 3    | 4    | 2    |      | 2    |      | 4    | 4    | 2        | 3    | 2    | 2    | 34   | 2.5 |
| Artery, Mineralization                                 |             |      |      |      | 2    |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 2    | 2.0  |     |
| Stomach, Forestomach                                   | +           | +    | +    | +    | +    | +    | +    | +    |      | +    | +    |      |      |      | +    |      |      | +    |      |      |          |      | +    | 34   |      |     |
| Cyst Epithelial Inclusion                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 1    |      |     |
| Edema  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 2    | 3.0  |     |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      | 4    | 3.0  |     |
| Stomach, Glandular                                     | +           | +    | +    | +    | +    | +    | +    | +    |      | +    | +    |      |      |      | +    |      |      | A    |      |      |          |      | +    | 27   |      |     |
| Mineralization   |             |      |      |      | 4    |      |      | 4    |      |      | 3    |      |      |      | 4    |      |      |      |      |      |          |      |      | 5    | 3.4  |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |       |
|--|-------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|-------|
|  | 0639        | 0583  | 0553  | 0517  | 0535  | 0673 | 0669 | 0588 | 0725 | 0540 | 0700 | 0778 | 0778 | 0778 | 0669 | 0777 | 0722 | 0728 | 0728 | 0728 |          | 0496 |       |
| ANIMAL ID  | 05872       | 05881 | 05882 | 05891 | 05892 | 0771 | 0772 | 0777 | 0777 | 0777 | 0777 | 0778 | 0788 | 0788 | 0991 | 0991 | 0992 | 0992 | 0993 | 0993 | 0994     | 0994 |       |
| Epithelium, Hyperplasia                                |             |       |       |       |       |      |      | 4    |      |      |      |      |      | 4    |      |      |      |      |      |      |          |      | 2 4.0 |

### CARDIOVASCULAR SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Blood Vessel Mineralization        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 6 3.3  |
| Heart                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |        |
| Cardiomyopathy                     | 2 |   | 2 | 4 | 3 | 1 | 2 | 4 | 3 | 1 | 4 | 2 | 2 | 4 | 2 | 3 | 3 | 2 | 1 | 1 | 2 | 1  | 45 2.4 |
| Metaplasia, Osseous Mineralization |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |    | 3 1.7  |
| Thrombosis                         |   |   |   | 3 |   |   |   | 4 |   |   | 4 |   |   |   | 3 |   |   |   |   |   |   |    | 6 3.2  |
|                                    |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2      |

### ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |        |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1      |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |    | 3 2.3  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 2 |   |   | 2 |    | 6 2.3  |
| Vacuolization Cytoplasmic         |   |   |   |   | 1 | 2 | 2 |   | 1 | 1 |   |   |   |   | 2 | 2 |   | 1 | 2 | 1 | 2 |    | 19 1.7 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |        |
| Hyperplasia                       |   |   |   |   | 1 |   | 1 | 4 |   |   | 2 |   |   |   |   | 3 | 1 |   |   |   | 1 |    | 10 1.8 |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |        |
| Parathyroid Gland                 | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |        |
| Hyperplasia                       | 2 |   | 2 |   |   |   | 2 | 4 | 1 |   | 3 | 2 | 1 | 4 |   | 2 | 1 |   | 2 |   | 2 | 1  | 27 2.3 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
|  | 0639        | 0583 | 0553 | 0517 | 0535 | 0663 | 0669 | 0588 | 0775 | 0540 | 0700 | 0772 | 0778 | 0669 | 0773 | 0778 | 0668 | 0772 | 0778 | 0778 |          | 0778 |
| ANIMAL ID  | 0582        | 0588 | 0588 | 0588 | 0588 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0778 | 0778 | 0778 | 0666 | 0666 | 0666 | 0666 | 0333 | 0444     | 0442 |

|                                  |  |   |   |   |  |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |    |     |
|----------------------------------|--|---|---|---|--|---|---|---|---|---|--|---|---|---|--|---|---|---|--|--|---|---|----|-----|
| Angiectasis                      |  |   |   |   |  | 4 |   |   |   |   |  |   |   | 4 |  |   |   | 4 |  |  |   |   | 7  | 4.0 |
| Hemorrhage                       |  |   |   |   |  |   |   |   |   |   |  |   |   |   |  | 4 |   |   |  |  |   |   | 1  | 4.0 |
| Pars Distalis, Cyst              |  |   |   |   |  |   |   |   | X |   |  |   |   |   |  |   | X |   |  |  | X |   | 5  |     |
| Pars Distalis, Cyst Multilocular |  |   |   |   |  |   |   |   |   |   |  |   | X |   |  |   |   |   |  |  |   |   | 3  |     |
| Pars Distalis, Hyperplasia       |  |   | 4 | 2 |  |   | 3 | 3 |   | 2 |  | 2 |   |   |  |   |   | 4 |  |  | 2 | 1 | 18 | 2.3 |
| Pars Distalis, Hypertrophy       |  | 1 |   |   |  |   |   |   |   |   |  | 2 |   |   |  |   |   |   |  |  |   |   | 3  | 1.7 |
| Pars Intermedia, Cyst            |  |   |   |   |  |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   | 1  |     |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 44 |     |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   | X |   | X |   |   | X |   |   |   |   |   |   |   |   | 5  |     |
| C-cell, Hyperplasia          |   |   |   | 3 |   |   |   |   |   | 1 | 2 | 2 | 1 |   |   |   |   |   |   |   |   |   | 11 | 1.9 |
| Follicle, Cyst               |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   | 3  |     |
| Follicular Cell, Hyperplasia | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 2 |   |   |   | 2 | 9  | 2.9 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 44 |     |
| Atrophy                           |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 3.3 |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Exfoliated Germ Cell              |   |   |   |   |   |   | 2 | 2 |   |   | 3 |   |   |   |   | 1 | 2 |   |   | 2 |   |   | 11 | 1.8 |
| Hypospermia                       |   |   |   | 4 |   |   | 4 |   |   | 4 | 4 | 4 |   |   |   |   | 4 |   | 4 | 3 |   |   | 15 | 3.9 |
| Infiltration Cellular, Lymphocyte |   |   | 1 |   | 1 |   | 1 |   |   | 1 |   | 1 |   |   | 1 | 1 | 1 | 2 |   | 1 | 1 |   | 16 | 1.1 |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   | 3  | 1.7 |
| Spermatocele                      |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |        |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------|
|  | 0639        | 0583 | 0553 | 0517 | 0535 | 0663 | 0669 | 0588 | 0725 | 0540 | 0700 | 0728 | 0778 | 0669 | 0775 | 0728 | 0683 | 0728 | 0728 | 0728 |          | 0747   |
| ANIMAL ID  | 0587        | 0588 | 0588 | 0589 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0577 | 0578 | 0588 | 0588 | 0599 | 0599 | 0599 | 0599 | 0599 | 0599 | 0599     | 0599   |
| Preputial Gland  |             | +    | +    | +    |      |      |      |      |      | +    | +    | +    |      |      |      | +    | +    | +    |      |      |          | 17     |
| Abscess  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |
| Atrophy  |             |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |          | 1 3.0  |
| Hyperkeratosis   |             |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      | 4    |      |      |          | 3 4.0  |
| Inflammation, Suppurative                              |             | 3    | 4    | 3    |      |      |      |      |      |      |      | 4    |      |      |      | 2    | 2    | 2    |      |      |          | 14 3.1 |
| Duct, Dilatation                                       |             |      |      | 4    |      |      |      |      |      | 3    | 4    |      |      |      | 3    | 3    | 4    |      |      |      |          | 13 3.5 |
| Prostate, Dorsal/lateral Lobe                          | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | 48     |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |
| Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |          | 1      |
| Cyst, Mucinous   |             |      |      | X    |      |      |      |      |      | X    | X    |      |      |      |      |      |      | X    |      |      | X        | 6      |
| Fibrosis   |             |      | 2    |      |      |      |      |      |      |      |      | 1    | 2    | 1    |      |      |      | 1    |      |      |          | 11 2.4 |
| Infiltration Cellular, Lymphocyte                      |             |      | 2    |      | 1    | 1    |      | 2    | 1    |      |      | 1    |      | 1    | 2    | 2    | 1    | 2    |      | 1    | 1        | 28 1.7 |
| Inflammation, Suppurative                              | 1           |      | 2    |      | 1    | 2    | 1    | 3    | 2    | 1    | 1    | 3    | 2    | 1    | 2    | 2    | 1    | 2    | 1    | 1    | 1        | 41 1.9 |
| Prostate, Ventral Lobe                                 | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | 47     |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4 3.3  |
| Fibrosis   |             |      | 1    |      |      | 1    |      | 4    |      |      | 2    |      |      |      |      |      | 2    |      |      |      | 1        | 12 2.4 |
| Infiltration Cellular, Lymphocyte                      | 1           |      | 1    |      | 1    |      | 4    | 1    | 1    |      |      |      |      |      |      |      | 2    |      |      |      |          | 15 1.9 |
| Inflammation, Suppurative                              |             | 1    |      |      |      |      | 4    |      |      |      |      |      |      |      |      | 1    |      |      |      |      | 2        | 9 2.6  |
| Epithelium, Hyperplasia                                | 4           |      |      |      |      |      |      | 3    |      |      |      | 2    | 4    |      | 1    | 2    | 1    | 2    |      | 2    | 1        | 17 2.2 |
| Seminal Vesicle  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | A    | +    | +    | +    | +        | 41     |
| Atrophy  |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4 3.8  |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 1.0  |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      | 2    |      |      |          | 4 2.5  |
| Lumen, Dilatation                                      |             |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |          | 2 3.0  |
| Testes   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | 48     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |        |        |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|
|  | 0639        | 0583   | 0553   | 0517   | 0535   | 0663   | 0669   | 0558   | 0778   | 0545   | 0750   | 0770   | 0778   | 0669   | 0775   | 0778   | 0663   | 0778   | 0722   | 0728   |          | 0778   | 0747   |
| ANIMAL ID  | 058872      | 058881 | 058882 | 058899 | 058971 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977 | 058977   | 058977 | 058977 |
| Polyarteritis  | 1           |        |        | 4      |        |        |        | 4      |        |        | 4      |        | 1      | 2      |        | 2      |        | 3      |        |        | 1        |        |        |
| Seminiferous Tubule, Degeneration                      | 2           |        | 1      | 4      | 1      | 2      | 2      | 4      | 1      | 1      | 4      | 4      | 4      | 1      | 2      | 2      | 1      | 4      | 1      | 4      | 4        |        | 1      |
|  |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |        |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Myeloid Cell, Hyperplasia                        |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                       |   |   | + | + | + |   | + | + |   | + |   | + |   | + |   |   |   |   |   |   |   | + |   |
| Axillary, Hyperplasia, Lymphoid                  |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Infiltration Cellular, Plasma Cell     |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                     |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hemorrhage                               |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell       |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Polymorphonuclear |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Degeneration, Cystic                |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hemorrhage                          |   |   |   | 4 |   |   |   | 2 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid               |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Infiltration Cellular, Histiocyte   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Renal, Degeneration, Cystic                      |   |   |   | 4 | 2 |   |   | 4 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
| Renal, Hemorrhage                                |   |   |   | 3 | 4 |   |   | 2 | 3 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
| Renal, Infiltration Cellular, Plasma Cell        |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Pigmentation                              |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                           | + |   | + | + |   | + | + |   |   |   |   |   |   |   |   |   | + |   | + |   |   | + |   |
| Degeneration, Cystic                             | 2 |   | 3 | 4 |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|  | 0639        | 0583 | 0553 | 0557 | 0553 | 0663 | 0669 | 0558 | 0775 | 0578 | 0770 | 0772 | 0778 | 0669 | 0775 | 0778 | 0663 | 0772 | 0778 | 0778 |          | 0777 | 0496 |
| ANIMAL ID  | 0587        | 0588 | 0588 | 0588 | 0588 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0778 | 0778 | 0778 | 0778 | 0666 | 0666 | 0666 | 0666 | 0663 | 0663     | 0494 | 0492 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell | 4 |   |   | 3 | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 8 3.5  |        |
| Lymph Node, Mesenteric                                   | 4 |   |   |   | 4 |   |   | 2 |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 | 10 3.5 |        |
| Spleen   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 47     |        |
| Hematopoietic Cell Proliferation                         | 1 |   |   |   | 4 |   |   | 4 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   | 9 2.7  |        |
| Hyperplasia, Lymphoid                                    |   |   |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 2.0  |        |
| Pigmentation   | 2 |   |   |   |   |   | 3 |   |   | 2 | 1 |   | 1 | 2 |   | 1 | 3 |   | 2 | 2 |   | 3 | 2 | 1      | 27 2.0 |
| Capsule, Fibrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |        |
| Thymus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 46     |        |
| Atrophy  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 44 4.0 |        |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Mammary Gland                | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 47     |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Galactocele                  |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   | X |   |   |   |   |   |   |   | 5      |
| Mineralization               |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Alveolus, Degeneration       |   |   |   | 3 | 4 |   |   | 4 | 2 |   | 4 |   | 3 | 4 |   | 4 |   |   |   |   |   |   | 4 | 22 3.5 |
| Alveolus, Dilatation         |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 3 |   |   | 6 2.5  |
| Duct, Dilatation             |   |   |   |   |   |   | 3 |   |   | 3 |   | 4 |   |   | 2 |   | 2 | 1 |   |   | 2 |   |   | 10 2.6 |
| Skin                         | + | + |   |   | + |   | + |   | + | + | + | + |   |   |   | + | + |   |   |   |   | + | + | 24     |
| Cyst Epithelial Inclusion    |   | X |   |   |   |   | X |   | X | X |   |   |   | X |   |   |   |   |   |   |   | X |   | 10     |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Inflammation, Suppurative    |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0  |
| Inflammation, Granulomatous  |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25.0 StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|  | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  | 6           | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 4 |          |
|  | 3           | 8 | 5 | 1 | 3 | 7 | 0 | 8 | 2 | 4 | 0 | 2 | 2 | 3 | 2 | 2 | 8 | 2 | 2 | 2 | 2 | 2 | 9 |          |
|  | 9           | 3 | 3 | 7 | 5 | 3 | 9 | 8 | 5 | 0 | 0 | 8 | 8 | 9 | 5 | 8 | 3 | 8 | 8 | 9 | 8 | 8 | 6 |          |
|  | 5           | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |          |
|  | 8           | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |          |
|  | 7           | 8 | 8 | 8 | 9 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 |          |
|  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 |          |

|                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Ulcer                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 2 | 3.5 |
| Epithelium, Hyperplasia            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 2 | 3.5 |
| Epithelium, Foot, Hyperplasia      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 4.0 |
| Foot, Edema                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 3.0 |
| Foot, Fibrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 4.0 |
| Foot, Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 4.0 |
| Foot, Necrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 | 4.0 |
| Foot, Ulcer                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 4.0 |

### MUSCULOSKELETAL SYSTEM

|                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|--|--|
| Bone                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | 1 |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |  |  |
| Vertebra, Fibrous Osteodystrophy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 1 | 4.0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |  |  |
| Bone, Femur                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | + | +   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 48 |  |  |
| Fibrous Osteodystrophy           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 |     |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 3 | 3.3 |    |  |  |
| Osteopetrosis                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 | 1 | 3.0 |    |  |  |
| Skeletal Muscle                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |     |    |  |  |

### NERVOUS SYSTEM

|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Brain, Brain Stem |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |   |     |
| Compression       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 1  |   |     |
| Hemorrhage        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 3  | 4 |     |
|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |    |   |     |
| Brain, Cerebellum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |   |     |
| Hemorrhage        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |    | 1 | 4.0 |
| Necrosis          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |    | 1 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST   |           | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-----------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE<br/>F1 25.0 StDose M</b> |           | 6               | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 4 | 4 |   |
|   |           | 3               | 8 | 5 | 1 | 3 | 7 | 0 | 8 | 2 | 4 | 0 | 2 | 2 | 3 | 2 | 2 | 8 | 2 | 2 | 2 | 2 | 2 | 9 | 9 |   |
|   |           | 9               | 3 | 3 | 7 | 5 | 3 | 9 | 8 | 5 | 0 | 0 | 8 | 8 | 9 | 5 | 8 | 3 | 8 | 9 | 8 | 8 | 7 | 6 | 6 |   |
|   | ANIMAL ID | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   |           | 5               | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |
|   |           | 8               | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |   |
|   |           | 7               | 8 | 8 | 9 | 9 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |   |
|   |           | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |   |
|   |           | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48    |
| Gliosis                   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Hemorrhage                |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 2 3.0 |
| Necrosis                  |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Ventricle, Dilatation     |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 6 1.5 |
| Nerve Trigeminal          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Peripheral Nerve, Tibial  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Spinal Cord, Cervical     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Spinal Cord, Lumbar       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0 |
| Spinal Cord, Thoracic     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |

**RESPIRATORY SYSTEM**

|                                   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  |        |   |
|-----------------------------------|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|--|---|---|---|--|---|---|--|--------|---|
| Lung                              | + | + | + | + | + | + | + | + |  | + | + | + | + | + | + |  | + | + | + |  | + | + |  | 39     |   |
| Foreign Body                      |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  |        | 1 |
| Infiltration Cellular, Histiocyte |   |   |   | 1 |   | 3 |   |   |  |   | 2 |   | 2 | 2 |   |  | 1 | 1 |   |  | 2 |   |  | 13 1.8 |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  | 1 1.0  |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  | 1 4.0  |   |
| Inflammation, Granulomatous       |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  | 1 1.0  |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  | 2 3.5  |   |
| Metaplasia, Osseous               |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |   |  |   |   |  | 2 1.0  |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
Test Type: CHRONIC  
Route: GAVAGE  
Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
Time Report Requested: 10:21:03  
First Dose M/F: 09/25/12 / 09/25/12  
Lab: NCTR

|  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0 | 0 | 0   | 0        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|---|---|-----|----------|-----|--|---|-----|---|---|---|--|---|--|--|--|--|----|-----|
| DAY ON TEST  |  | 6 | 5 | 5 | 5 | 5 | 6 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7  | 7   | 7 | 7 | 4   | 4        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE                     |  | 3 | 8 | 5 | 1 | 3 | 7 | 0 | 8 | 2 | 4 | 0 | 2 | 2 | 3 | 2 | 2 | 8 | 2 | 2  | 2   | 2 | 2 | 9   | 9        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| F1 25.0 StDose M                                       |  | 9 | 3 | 3 | 7 | 5 | 3 | 9 | 8 | 5 | 0 | 0 | 8 | 8 | 9 | 5 | 8 | 3 | 8 | 8  | 8   | 8 | 7 | 6   | 6        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| ANIMAL ID  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0   | 0 | 0 | 0   | 0        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|  |  | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9  | 9   | 9 | 9 | 9   | 9        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|  |  | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 6  | 6   | 6 | 6 | 6   | 6        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|  |  | 7 | 8 | 8 | 8 | 9 | 9 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 1 | 2 | 3  | 3   | 4 | 4 | 4   | 4        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|  |  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2  | 1   | 2 | 2 | 2   | 2        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
|  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | * TOTALS |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Alveolar Epithelium, Hyperplasia                       |  | 1 |   |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   | 1 |   |   | 1  |     |   | 6 | 1.5 |          |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Bronchiole, Epithelium, Hyperplasia                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 4.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Subpleura, Cyst  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Nose   |  | + |   |   |   |   |   | + |   | + |   |   |   | + |   |   |   |   |   | 31 |     |   |   |     |          |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Fibrous Osteodystrophy                                 |  |   |   | 2 |   |   |   | 4 |   |   |   |   |   | 3 |   |   |   |   |   | 3  | 3.0 |   |   |     |          |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Foreign Body   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Inflammation, Suppurative                              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 4        | 2.3 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |  | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     |          |     |  | 4 | 2.3 |   |   |   |  |   |  |  |  |  |    |     |
| Posterior To Upper Incisor, Malformation               |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |  | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     |          |     |  |   |     | 2 | 2 | 2 |  | 2 |  |  |  |  | 11 | 2.0 |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 2        | 2.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Transitional Epithelium, Accumulation, Hyaline Droplet |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 3.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Upper Molar, Inflammation, Suppurative                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 4.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Upper Molar, Keratin Cyst                              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Upper Molar, Necrosis                                  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 4.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Trachea  |  | + |   |   |   |   |   | + |   | + |   |   |   | A |   |   |   |   |   | 27 |     |   |   |     |          |     |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Inflammation, Chronic Active                           |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 1.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |
| Epithelium, Hyperplasia                                |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |   |   |     | 1        | 3.0 |  |   |     |   |   |   |  |   |  |  |  |  |    |     |

SPECIAL SENSES SYSTEM

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Eye                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |     |
| Cataract                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 3.0 |
| Fibrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 4.0 |
| Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS MALE</b><br><b>F1 25.0 StDose M</b> | DAY ON TEST | 0639  | 0583  | 0553  | 0517  | 0535  | 0663  | 0669  | 0578  | 0758  | 0570  | 0728  | 0778  | 0778  | 0669  | 0775  | 0778  | 0683  | 0728  | 0728  | 0778  | 0778  | 0496  |
|   | ANIMAL ID   | 05872 | 05881 | 05882 | 05891 | 05892 | 05771 | 05772 | 05777 | 05778 | 05779 | 05772 | 05777 | 05778 | 05778 | 05788 | 05788 | 05961 | 05961 | 05962 | 05963 | 05963 | 05964 |

\* TOTALS

Cornea, Inflammation, Suppurative 1 4.0  
 Cornea, Necrosis 1 4.0  
 Cornea, Ulcer 2 4.0

Zymbal's Gland + 1

URINARY SYSTEM

Kidney + 48

Accumulation, Hyaline Droplet 1 4.0  
 Hemorrhage 1 4.0  
 Infiltration Cellular, Polymorphonuclear 1 1 9 1.7  
 Mineralization 4 4 3 3.3  
 Necrosis 1 4.0  
 Nephropathy 4 3 1 4 4 3 3 4 4 3 4 3 2 4 1 4 4 4 3 3 4 2 4 45 3.2  
 Polyarteritis 1 2.0  
 Thrombosis X 1  
 Cortex, Cyst X X X X X X X X X 12  
 Pelvis, Dilatation 2 1 2.0  
 Renal Tubule, Cyst X X X X X X 20  
 Renal Tubule, Hyperplasia, Atypical 3 1 3.0  
 Transitional Epithelium, Hyperplasia 4 2 2 1 1 2 12 1.8

Urinary Bladder + + 4  
 Lumen, Dilatation 4 4 4 4.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                    |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|--|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |  |
|  | ANIMAL ID   | 7 | 7 | 5 | 5 | 5 | 5 | 4 | 7 | 7 | 6 | 4 | 4 | 6 | 6 | 5 | 6 | 7 | 5 | 3 | 7 | 6 | 7 | 4 | 7 |           |                    |  |
|  |             | 2 | 2 | 7 | 1 | 6 | 8 | 0 | 0 | 2 | 2 | 2 | 9 | 1 | 3 | 9 | 3 | 2 | 2 | 4 | 4 | 2 | 3 | 2 | 0 | 2         |                    |  |
|  |             | 7 | 9 | 4 | 1 | 9 | 8 | 7 | 0 | 7 | 8 | 5 | 8 | 2 | 3 | 2 | 8 | 1 | 7 | 3 | 4 | 8 | 9 | 9 | 4 | 5         |                    |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                    |  |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 6 | 6 | 6         |                    |  |
|  |             | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0         |                    |  |
|  |             | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3         |                    |  |
|  |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         |                    |  |

ALIMENTARY SYSTEM

|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|  | 0727        | 0754 | 0755 | 0755 | 0755 | 0755 | 0754 | 0777 | 0777 | 0766 | 0744 | 0744 | 0766 | 0766 | 0755 | 0766 | 0777 | 0755 | 0733 | 0777 |           |                    | 0766 | 0777 | 0744 |
| Biliary Tract, Fibrosis                                |             |      | 1    |      |      | 1    |      |      |      |      |      | 2    |      |      |      |      |      | 1    |      |      |           |                    |      | 2    |      |
| Hepatocyte, Necrosis                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      | 1    |      |
| Mesentery  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Pancreas   | +           | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  | +    |      |      |
| Basophilic Focus                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |           |                    |      |      |      |
| Cyst Multilocular                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |           |                    |      |      |      |
| Infiltration Cellular, Lymphocyte                      | 2           | 2    | 2    |      | 2    | 2    | 2    |      | 1    | 1    | 2    | 2    |      | 1    | 2    | 1    |      | 1    | 1    | 2    |           | 1                  | 1    | 2    |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |           |                    |      |      |      |
| Lipomatosis  |             |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      | 2    |      |      |           |                    |      | 2    |      |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Pigmentation   | 2           |      |      |      | 1    | 1    | 3    |      | 1    | 1    | 1    | 1    | 1    |      | 1    | 1    |      | 1    | 1    | 2    |           |                    | 1    |      |      |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |           |                    |      |      |      |
| Acinus, Degeneration                                   | 4           | 3    | 2    |      | 3    | 2    | 4    | 2    | 2    | 2    | 2    | 2    | 1    | 1    | 2    | 3    | 1    | 4    | 1    | 1    | 2         |                    | 2    | 2    | 3    |
| Salivary Glands  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      | 4    |      |
| Stomach, Forestomach                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Edema  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Ulcer  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Stomach, Glandular                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Edema  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |      |      |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|------|
|  | 0727        | 0754 | 0755 | 0755 | 0755 | 0755 | 0754 | 0777 | 0777 | 0766 | 0744 | 0744 | 0766 | 0766 | 0755 | 0766 | 0777 | 0755 | 0733 | 0777 |           |                    | 0766 | 0777 | 0744 | 0777 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 0    | 0    | 0    | 0    |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3         | 3                  | 6    | 6    | 6    | 6    |
|  | 6           | 6    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8         | 0                  | 0    | 0    | 0    | 0    |
|  | 9           | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 5    | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 8    | 9    | 9         | 1                  | 1    | 2    | 2    | 3    |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                  | 1    | 2    | 1    | 2    |

Necrosis

Islets, Pancreatic

Parathyroid Gland  
Hyperplasia

Pituitary Gland  
Angiectasis  
Hemorrhage  
Pars Distalis, Cyst  
Pars Distalis, Degeneration  
Pars Distalis, Hyperplasia  
Pars Distalis, Hypertrophy  
Pars Intermedia, Cyst

Thyroid Gland  
Ultimobranchial Cyst  
C-cell, Hyperplasia  
Follicle, Cyst  
Follicular Cell, Hyperplasia

**GENERAL BODY SYSTEM**

Tissue NOS

**GENITAL SYSTEM**

Coagulating Gland  
Atrophy

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M |      | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |      |
|--|------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|------|
| ANIMAL ID  |      | 0727        | 0729 | 0724 | 0721 | 0719 | 0718 | 0717 | 0716 | 0715 | 0714 | 0713 | 0712 | 0711 | 0710 | 0709 | 0708 | 0707 | 0706 | 0705 | 0704 |                    | 0703 | 0702 |
| 0691   | 0692 | 0697        | 0698 | 0699 | 0691 | 0692 | 0693 | 0694 | 0695 | 0696 | 0697 | 0698 | 0699 | 0691 | 0692 | 0693 | 0694 | 0695 | 0696 | 0697 | 0698 | 0699               | 0691 | 0692 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Exfoliated Germ Cell              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hypospermia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat Pad, Epididymal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Preputial Gland                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Duct, Dilatation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Prostate, Dorsal/lateral Lobe     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|------|
|  | 0727        | 0729  | 0754  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  |                    | 0755 |
| ANIMAL ID  | 01691       | 01692 | 01693 | 01694 | 01695 | 01696 | 01697 | 01698 | 01699 | 01700 | 01701 | 01702 | 01703 | 01704 | 01705 | 01706 | 01707 | 01708 | 01709 | 01710 | 01711 | 01712 | 01713 | 01714 | 01715 | 01716              |      |
| Prostate, Ventral Lobe Atrophy                         | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  |      |
| Fibrosis   |             |       |       |       |       |       |       | 4     | 1     |       |       |       |       |       | 4     | 2     |       |       |       |       |       |       |       |       |       |                    |      |
| Infiltration Cellular, Lymphocyte                      | 1           | 1     |       |       | 1     |       | 4     | 2     | 1     |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       | 1                  |      |
| Inflammation, Suppurative                              |             |       |       |       | 1     | 4     | 1     |       |       |       |       |       |       | 2     |       |       |       |       |       | 1     |       |       |       |       |       |                    |      |
| Polyarteritis Epithelium, Hyperplasia                  |             | 4     |       | 1     |       | 2     |       |       |       |       | 2     | 2     |       |       |       | 2     |       | 2     |       |       |       |       |       | 3     |       | 4                  |      |
| Seminal Vesicle Atrophy                                | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  |      |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3                  |      |
| Infiltration Cellular, Lymphocyte                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |      |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |      |
| Polyarteritis Epithelium, Hyperplasia                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |      |
| Lumen, Dilatation                                      |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3                  |      |
| Testes Aspermia  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  |      |
| Edema  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |      |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4                  |      |
| Seminiferous Tubule, Degeneration                      |             | 4     |       |       |       | 4     | 1     | 1     | 1     | 3     | 2     | 1     | 1     | 3     | 1     | 3     | 1     | 2     | 2     |       |       |       |       |       | 3     | 3                  |      |
| Seminiferous Tubule, Dilatation                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1                  | 2    |

**HEMATOPOIETIC SYSTEM**

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow Hypocellularity | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | males<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
|  | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>9 | 0<br>5<br>7<br>4 | 0<br>5<br>1<br>1 | 0<br>5<br>6<br>9 | 0<br>5<br>8<br>8 | 0<br>5<br>0<br>7 | 0<br>4<br>0<br>0 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>6<br>2<br>5 | 0<br>4<br>9<br>8 | 0<br>4<br>1<br>2 | 0<br>6<br>3<br>2 | 0<br>6<br>9<br>2 | 0<br>5<br>2<br>8 | 0<br>6<br>2<br>1 | 0<br>7<br>2<br>7 | 0<br>5<br>4<br>4 | 0<br>3<br>4<br>8 | 0<br>7<br>2<br>9 | 0<br>6<br>3<br>9 | 0<br>7<br>2<br>9 | 0<br>4<br>0<br>4 | 0<br>7<br>2<br>5 |                    |
|  | ANIMAL ID        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Myeloid Cell, Hyperplasia                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Lymph Node   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Iliac, Hyperplasia, Lymphoid                           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                  |
| Iliac, Infiltration Cellular, Plasma Cell              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Inguinal, Hyperplasia, Lymphoid                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Inguinal, Infiltration Cellular, Plasma Cell           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Lumbar, Degeneration, Cystic                           |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Lumbar, Hyperplasia, Lymphoid                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Lumbar, Infiltration Cellular, Plasma Cell             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Mediastinal, Degeneration, Cystic                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Mediastinal, Hemorrhage                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                  |
| Mediastinal, Infiltration Cellular, Mast Cell          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Mediastinal, Infiltration Cellular, Plasma Cell        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Pancreatic, Infiltration Cellular, Plasma Cell         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Popliteal, Infiltration Cellular, Plasma Cell          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Renal, Degeneration, Cystic                            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Renal, Hemorrhage                                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Renal, Infiltration Cellular, Plasma Cell              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                  |
| Lymph Node, Mandibular                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Degeneration, Cystic                                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                  |
| Hyperplasia, Lymphoid                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                  |
| Infiltration Cellular, Plasma Cell                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                  |
| Lymph Node, Mesenteric                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Hemorrhage   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Hyperplasia, Lymphoid                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |
| Spleen   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|--|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|  |  | 0727        | 0754  | 0755  | 0755  | 0755  | 0755  | 0754  | 0777  | 0777  | 0766  | 0744  | 0744  | 0766  | 0766  | 0755  | 0766  | 0777  | 0755  | 0733  | 0777  | 0766  | 0777  | 0744  | 0777  |                    |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M |  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|  |  | ANIMAL ID   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
|  |  | 01691       | 01692 | 01697 | 01690 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 | 01691 |                    |

Congestion 4  
 Hematopoietic Cell Proliferation 1 1  
 Hyperplasia, Lymphoid 2 2 3  
 Pigmentation 2 2 2 2 3 1 1 1 4  
 Polyarteritis 1

Thymus + + + + + + + + + + M + + + + + + + M + + + + + + +  
 Atrophy 4 4 4 4 4 4 4 4 4 4 4 3 4 4 4 4 4 2 4 4 4 4 4 4  
 Polyarteritis 1

INTEGUMENTARY SYSTEM

Mammary Gland +  
 Galactocele  
 Hyperplasia, Lobular  
 Polyarteritis 1  
 Alveolus, Degeneration 3 3 4 4 4 2 3 3 4 4 4 4 4 4 3 4 3 3 3  
 Alveolus, Dilatation 3 3  
 Duct, Dilatation 2 3 2 4 2

Skin + + + + +  
 Cyst Epithelial Inclusion X  
 Fibrosis 4  
 Foreign Body X  
 Inflammation, Suppurative 4  
 Inflammation, Granulomatous 4  
 Necrosis 4  
 Ulcer 4  
 Epithelium, Foot, Hyperplasia 4  
 Foot, Fibrosis 4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|
|  | 0727        | 0729 | 0574 | 0551 | 0559 | 0558 | 0557 | 0470 | 0777 | 0778 | 0662 | 0449 | 0441 | 0663 | 0669 | 0553 | 0662 | 0774 | 0553 | 0374 | 0668 | 0779 | 0442 | 0773 |           |                    | 0664 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 0    |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 6    | 6    | 6    | 6         | 6                  | 6    |
|  | 6           | 6    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 0    | 0    | 0    | 0         | 0                  | 0    |
|  | 9           | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 5    | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 9    | 9    | 1    | 1    | 2    | 2    | 2         | 3                  | 1    |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                  | 1    |

Foot, Inflammation, Chronic Active  
Foot, Necrosis  
Foot, Ulcer

4  
4

MUSCULOSKELETAL SYSTEM

Bone  
Metatarsal, Hyperostosis  
  
Bone, Femur  
Fibrous Osteodystrophy  
  
Skeletal Muscle

+  
  
  
  
+

NERVOUS SYSTEM

Brain, Brain Stem  
Compression  
Gliosis  
Hemorrhage  
Vacuolization Cytoplasmic  
  
Brain, Cerebellum  
  
Brain, Cerebrum  
Gliosis  
Necrosis  
Ventricle, Dilatation  
  
Nerve Trigeminal

+  
2 2 2 2 2  
  
+  
  
+  
  
1  
  
+ +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|--|
|  |             | 7 | 7 | 5 | 5 | 5 | 5 | 4 | 7 | 7 | 6 | 4 | 4 | 6 | 6 | 5 | 6 | 7 | 5 | 3 | 7 | 6 | 7 | 4 | 7 |           |                    |  |
|  |             | 2 | 2 | 7 | 1 | 6 | 8 | 0 | 0 | 2 | 2 | 2 | 9 | 1 | 3 | 9 | 3 | 2 | 2 | 4 | 4 | 2 | 3 | 2 | 0 | 2         |                    |  |
|  |             | 7 | 9 | 4 | 1 | 9 | 8 | 7 | 0 | 7 | 8 | 5 | 8 | 2 | 3 | 2 | 8 | 1 | 7 | 3 | 4 | 8 | 9 | 9 | 4 | 5         |                    |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                    |  |
|  |             | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 6 | 6         |                    |  |
|  |             | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0         |                    |  |
|  |             | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 1 | 1 | 2 | 2 | 3         |                    |  |
|  |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         |                    |  |

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |   |
| Peripheral Nerve, Sciatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |
| Peripheral Nerve, Tibial  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |
| Spinal Cord, Cervical     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |
| Spinal Cord, Lumbar       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 |
| Spinal Cord, Thoracic     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + |

RESPIRATORY SYSTEM

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Lung                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Congestion                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Foreign Body                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Hemorrhage                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Infiltration Cellular, Histiocyte |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Inflammation, Granulomatous       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Inflammation, Chronic Active      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Metaplasia, Osseous               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Mineralization                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Alveolar Epithelium, Hyperplasia  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Nose                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Autolysis                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Fibrous Osteodystrophy            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|  | 0727        | 0729  | 0754  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  | 0755  |                    |
|  | ANIMAL ID   | 01691 | 01692 | 01693 | 01694 | 01695 | 01696 | 01697 | 01698 | 01699 | 01700 | 01701 | 01702 | 01703 | 01704 | 01705 | 01706 | 01707 | 01708 | 01709 | 01710 | 01711 | 01712 | 01713 | 01714 |                    |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Nephropathy  | 2           | 2     | 2     | 1     | 2     | 3     | 3     |       | 2     | 3     | 4     | 4     | 3     | 3     | 1     | 4     | 4     | 4     | 4     | 3     | 4     | 3     | 4     | 4     | 3     |                    |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       | 4     |       |                    |
| Polycystic Kidney                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |                    |
| Thrombosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |                    |
| Cortex, Cyst   | X           | X     | X     |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | X     |       |                    |
| Pelvis, Dilatation                                     |             | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pelvis, Inflammation, Chronic Active                   |             |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Renal Tubule, Cyst                                     |             | X     |       | X     |       |       |       |       | X     |       | X     |       |       | X     |       |       | X     | X     |       | X     |       | X     | X     |       |       |                    |
| Renal Tubule, Hyperplasia, Atypical                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Transitional Epithelium, Hyperplasia                   |             |       |       |       |       |       | 2     |       | 1     |       | 1     |       |       |       |       |       | 2     | 2     |       |       |       |       |       |       |       |                    |
| Urinary Bladder  |             |       |       |       |       |       |       |       | +     | +     |       |       | +     |       |       |       | +     |       |       |       |       |       |       |       |       |                    |
| Lumen, Dilatation                                      |             |       |       |       |       |       | 3     | 4     |       |       |       | 4     |       |       |       |       | 4     |       |       |       |       |       |       |       |       |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |   | ANIMAL ID |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |           |
|--|-------------|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|-----------|
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0 | 0         |
|  | 7           | 5 | 5         | 4 | 6 | 4 | 6 | 7 | 5 | 7 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 7 | 5 | 6 | 5 | 7 | 4 | 6 | 5 | 7 | 4 | 6 | 5 | 7 | 4        | 6 | 5 |           |
|  | 2           | 4 | 1         | 4 | 8 | 9 | 5 | 2 | 5 | 2 | 6 | 9 | 1 | 4 | 8 | 6 | 3 | 2 | 2 | 6 | 6 | 8 | 2 | 7 | 0 | 9 | 0 | 9 | 0 | 9 | 0        | 9 | 0 |           |
|  | 4           | 1 | 8         | 4 | 9 | 1 | 8 | 8 | 9 | 5 | 9 | 9 | 0 | 4 | 7 | 9 | 1 | 7 | 7 | 7 | 4 | 9 | 7 | 5 | 5 | 1 | 1 | 1 | 1 | 1 | 1        | 1 | 1 |           |
|  | 0           | 0 | 0         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 |           |
|  | 6           | 6 | 6         | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9        | 9 | 9 |           |
|  | 0           | 0 | 0         | 0 | 0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7        | 7 |   |           |
|  | 3           | 4 | 4         | 5 | 5 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9        | 9 |   |           |
|  | 2           | 1 | 2         | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1        | 2 | 1 | <b>37</b> |

**ALIMENTARY SYSTEM**

|   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               |              |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|---------------|--------------|
| Esophagus                               |  | + | + | + | + | + | + |   | + | + | + | + | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + | <b>37</b> |           |               |              |
| Intestine Large, Colon                  |  | + | + | + | + | + | + |   | + |   | A | + | + | + | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   | + | + | +         | <b>33</b> |               |              |
| Fibrosis                                |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1 3.0</b> |
| Epithelium, Hyperplasia                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1 4.0</b> |
| Intestine Small, Ileum                  |  | + | + | + | + | + | + |   | + |   | A | + | A | + | + | + | + |   | + | + | + |   | + | A | + |   |   |   |   |   |   | <b>31</b> |           |               |              |
| Intestine Small, Jejunum                |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  |               |              |
| Liver                                   |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>50</b> |               |              |
| Angiectasis                             |  | 2 |   |   |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>5 2.0</b> |
| Basophilic Focus                        |  | X |   | X | X | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>9</b>     |
| Clear Cell Focus                        |  | X |   |   | X |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>10</b>    |
| Congestion                              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1 4.0</b> |
| Degeneration, Cystic                    |  | 2 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 | 1 |   |   |   | 1 | 1 |   |   | 2 | 2 |   |   |   |           |           | <b>20 1.4</b> |              |
| Fatty Change                            |  |   |   |   |   |   |   |   |   |   |   | 1 |   | 4 |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 3 |   |   |   |           |           | <b>6 2.5</b>  |              |
| Hematopoietic Cell Proliferation        |  |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>2 1.0</b> |
| Hemorrhage                              |  |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>2 1.5</b> |
| Hepatodiaphragmatic Nodule              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>5</b>     |
| Infiltration Cellular, Mononuclear Cell |  | 1 |   |   | 1 | 2 | 1 | 1 | 2 |   |   | 1 |   |   |   | 1 |   | 1 |   |   |   |   | 1 | 2 | 1 | 1 | 1 | 1 | 1 |   |   |           |           | <b>33 1.2</b> |              |
| Inflammation, Chronic Active            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1 2.0</b> |
| Mixed Cell Focus                        |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1</b>     |
| Pigmentation                            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1 2.0</b> |
| Tension Lipidosis                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>3 3.3</b> |
| Vacuolization Cytoplasmic               |  |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |           |           | <b>12 1.6</b> |              |
| Bile Duct, Hyperplasia                  |  | 2 |   |   |   | 1 |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>12 1.6</b> |              |
| Biliary Tract, Cyst Multilocular        |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |               | <b>1</b>     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|  | 0724        | 0541  | 0558  | 0444  | 0668  | 0449  | 0665  | 0772  | 0558  | 0778  | 0669  | 0445  | 0661  | 0664  | 0447  | 0663  | 0772  | 0557  | 0664  | 0558  |          |       | 0774  | 0446  | 0665  |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06055 | 06051 | 06077 | 06077 | 06077 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06077 | 06077 | 06077    | 06077 | 06099 | 06099 | 06099 |
| Biliary Tract, Fibrosis                                |             |       |       |       |       | 1     | 2     |       |       |       |       |       |       | 1     | 1     | 1     |       |       | 1     |       |          |       | 1     |       |       |
| Hepatocyte, Necrosis                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |
| Mesentery  |             |       | +     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Pancreas   | +           | +     |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 49    |
| Basophilic Focus                                       |             |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2     |
| Cyst Multilocular                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Infiltration Cellular, Lymphocyte                      | 2           |       | 2     | 1     |       | 2     | 1     |       | 1     | 2     | 2     |       | 2     | 1     |       | 2     | 2     | 2     |       | 2     | 2        | 1     |       |       | 37    |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Lipomatosis  |             |       |       | 3     |       |       |       |       | 2     | 2     | 2     |       |       |       |       |       | 3     |       |       |       |          |       |       | 3     |       |
| Mineralization   |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Pigmentation   |             |       |       | 1     | 1     |       | 1     | 1     |       |       |       | 1     | 1     |       |       | 2     |       | 1     | 1     |       | 1        | 1     | 1     |       | 1     |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Acinus, Degeneration                                   | 4           |       | 2     | 2     |       | 3     | 2     |       | 2     | 2     | 2     |       |       |       | 1     | 1     | 4     | 3     | 3     | 2     |          | 1     | 2     | 3     | 1     |
| Salivary Glands  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |
| Stomach, Forestomach                                   |             |       |       | +     | +     | +     | +     | +     |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 37    |
| Edema  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Ulcer  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Epithelium, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Stomach, Glandular                                     |             |       |       | +     | +     | +     | +     | +     | +     |       | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 35    |
| Edema  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 4     |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 3     |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 3     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|  | 0724        | 0541  | 0558  | 0444  | 0668  | 0449  | 0665  | 0772  | 0558  | 0775  | 0662  | 0669  | 0446  | 0664  | 0668  | 0443  | 0667  | 0556  | 0666  | 0774  |          | 0447  | 0665  | 0770  | 0669  |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06055 | 06051 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077 | 06077    | 06077 | 06077 | 06077 | 06077 |

|                                    |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |
|------------------------------------|---|---|---|---|---|---|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|-----|
| Necrosis                           |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 1   | 4.0 |
| Islets, Pancreatic                 | + |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |     |     |
| Parathyroid Gland Hyperplasia      | 2 |   | 4 |   | 1 | 1 | 3 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |
|                                    |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 23 | 2.0 |     |
| Pituitary Gland Angiectasis        | + |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |     |     |
| Hemorrhage                         |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 4   | 9   |
| Pars Distalis, Cyst                |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  |     | 4.0 |
| Pars Distalis, Degeneration        |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  | X   | 10  |
| Pars Distalis, Hyperplasia         |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  | X   | 10  |
| Pars Distalis, Hypertrophy         | 1 |   | 2 |   | 2 | 2 |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |
| Pars Intermedia, Cyst              | 2 | 2 |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |
|                                    |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 2   | 3.0 |
| Thyroid Gland Ultimobranchial Cyst | + |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 45 |     |     |
| C-cell, Hyperplasia                | 1 | 1 |   | 1 |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |
| Follicle, Cyst                     |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 2   | 3   |
| Follicular Cell, Hyperplasia       |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  |     | 3   |
|                                    |   |   |   |   |   |   |   |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 3   | 3   |

**GENERAL BODY SYSTEM**

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|

**GENITAL SYSTEM**

|                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     |
|---------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|-----|
| Coagulating Gland Atrophy | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |   |     |
|                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 1 | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |    | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----------|
|  | 0724        | 0754  | 0758  | 0744  | 0766  | 0744  | 0766  | 0777  | 0755  | 0776  | 0766  | 0744  | 0766  | 0766  | 0744  | 0766  | 0777  | 0755  | 0766  | 0757  | 0744  | 0766  | 0755  |    |          |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06051 | 06055 | 06071 | 06077 | 06077 | 06079 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 |    |          |
| Fibrosis   |             |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 4.0      |
| Inflammation, Chronic Active Epithelium, Hyperplasia   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 2.0      |
| Epididymis   | +           | +     |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50 |          |
| Exfoliated Germ Cell                                   |             |       | 3     |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       | 2     |       |       |       |       | 2     | 13 | 1.8      |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       | 1  | 2.0      |
| Hypospermia  |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 4     |       |       |       |       | 4     | 7  | 4.0      |
| Infiltration Cellular, Lymphocyte                      | 1           |       |       | 1     | 1     |       |       |       |       |       | 1     |       |       |       |       |       |       | 2     |       |       |       | 1     | 1     | 14 | 1.2      |
| Polyarteritis  |             |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 4  | 1.8      |
| Fat Pad, Epididymal                                    | +           |       |       |       |       |       |       |       |       |       | +     |       |       |       |       |       |       | +     |       |       |       |       |       | 4  |          |
| Inflammation, Chronic Active                           | 3           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 3.0      |
| Mineralization   | 2           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 2.0      |
| Necrosis   | 4           |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 4     |       |       |       | 4     |       | 4  | 4.0      |
| Preputial Gland  |             |       |       |       |       | +     |       |       |       |       | +     | +     |       |       |       |       | +     |       |       |       |       |       | +     | 19 |          |
| Atrophy  |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       | 3  | 3.3      |
| Hyperkeratosis   |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       | 4     |       |       |       |       |       |       | 5  | 3.8      |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       | 4     | 4     |       |       |       |       |       | 4     | 13 | 3.5      |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 2.0      |
| Duct, Dilatation                                       |             |       |       |       |       |       |       |       |       |       | 4     | 4     |       |       |       | 4     | 4     |       |       |       |       |       | 3     | 15 | 3.7      |
| Prostate, Dorsal/lateral Lobe                          | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50 |          |
| Cyst, Mucinous   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 5  |          |
| Fibrosis   |             |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       | 2     | 2     | 8  | 2.6      |
| Infiltration Cellular, Lymphocyte                      | 1           |       |       | 1     | 4     | 1     |       |       | 1     | 1     | 1     |       |       |       |       | 1     |       |       |       |       | 2     | 1     | 2     | 27 | 1.6      |
| Inflammation, Suppurative                              | 1           |       | 1     | 1     | 4     |       |       | 2     | 2     | 3     | 2     | 2     |       |       | 2     | 2     | 1     | 1     | 4     | 1     | 3     |       | 2     | 42 | 2.1      |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 1  | 2.0      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
|  | 0724        | 0541  | 0558  | 0444  | 0668  | 0449  | 0665  | 0772  | 0558  | 0778  | 0559  | 0666  | 0449  | 0661  | 0664  | 0446  | 0663  | 0772  | 0557  | 0664  |          | 0557  | 0446  | 0665  | 0559  | 0449  |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06051 | 06062 | 06071 | 06077 | 06079 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099    | 06099 | 06099 | 06099 | 06099 | 06099 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Prostate, Ventral Lobe            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Atrophy                           |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Fibrosis                          |   |   |   |   | 4 |   |   |   |   | 2 |   | 2 |   |   | 3 |   |   | 3 | 3 |   |   |   |   |   |   | 10 2.8 |
| Infiltration Cellular, Lymphocyte |   |   |   |   | 3 | 1 |   | 1 |   |   |   | 2 |   | 2 |   |   | 1 |   | 2 | 3 |   |   |   |   |   | 16 1.8 |
| Inflammation, Suppurative         |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 |   |   |   |   |   | 8 2.1  |
| Mineralization                    | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 2.0  |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 1.0  |
| Epithelium, Hyperplasia           |   |   |   |   |   |   | 2 |   | 2 |   |   |   | 1 | 2 |   | 2 |   |   |   |   |   | 1 | 1 |   |   | 16 2.1 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Seminal Vesicle                   | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | 47    |
| Atrophy                           |   |   | 2 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 | 5 3.0 |
| Fibrosis                          |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4.0 |
| Infiltration Cellular, Lymphocyte |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 4 2.8 |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 3 3.0 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |        |
| Aspermia                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |        |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |        |
| Polyarteritis                     | 2 |   | 1 |   | 2 | 2 | 1 |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 4 |   | 14 1.9 |        |
| Seminiferous Tubule, Degeneration | 2 | 1 | 2 |   |   | 1 | 1 | 2 | 4 |   | 3 |   | 2 | 1 |   |   |   | 4 | 3 | 2 | 4 | 1 |   | 4 | 2      | 36 2.2 |
| Seminiferous Tubule, Dilatation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 4.0  |

HEMATOPOIETIC SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Hypocellularity |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 3 |   |   | 3 |   |   |   | 4 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |             |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------------|
|  | 0724        | 0541  | 0558  | 0444  | 0668  | 0449  | 0665  | 0772  | 0558  | 0778  | 0662  | 0669  | 0446  | 0664  | 0668  | 0443  | 0667  | 0556  | 0664  | 0557  |          | 0445  | 0666  | 0559  | 0441  | 0665  | 0551        |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06051 | 06055 | 06071 | 06077 | 06079 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099    | 06099 | 06099 | 06099 | 06099 | 06099 |             |
| Myeloid Cell, Hyperplasia                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 4 3 4 3.5 |
| Lymph Node   | +           | +     |       |       |       |       |       | +     | +     | +     |       |       |       |       |       | +     | +     |       |       | +     | +        |       |       |       |       |       | 15 3.0      |
| Iliac, Hyperplasia, Lymphoid                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 4.0       |
| Iliac, Infiltration Cellular, Plasma Cell              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 4.0       |
| Inguinal, Hyperplasia, Lymphoid                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 4.0       |
| Inguinal, Infiltration Cellular, Plasma Cell           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 4.0       |
| Lumbar, Degeneration, Cystic                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 4.0       |
| Lumbar, Hyperplasia, Lymphoid                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 2.5       |
| Lumbar, Infiltration Cellular, Plasma Cell             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 4.0       |
| Mediastinal, Degeneration, Cystic                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 4.0       |
| Mediastinal, Hemorrhage                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 3.7       |
| Mediastinal, Infiltration Cellular, Mast Cell          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 3.0       |
| Mediastinal, Infiltration Cellular, Plasma Cell        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 4.0       |
| Pancreatic, Infiltration Cellular, Plasma Cell         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 1 4.0       |
| Popliteal, Infiltration Cellular, Plasma Cell          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 4.0       |
| Renal, Degeneration, Cystic                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 6 3.7     |
| Renal, Hemorrhage                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 3 3.0     |
| Renal, Infiltration Cellular, Plasma Cell              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 1 4.0     |
| Lymph Node, Mandibular                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 9 3.0       |
| Degeneration, Cystic                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 3.0       |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 5 3.6     |
| Infiltration Cellular, Plasma Cell                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 4 3 5 3.8   |
| Lymph Node, Mesenteric                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 2 1 3.0     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 1 3.0     |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 3 1 3.0     |
| Spleen   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 49          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |     |     |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-----|-----|-----|
|  | 074         | 051   | 058   | 044   | 068   | 049   | 065   | 072   | 058   | 078   | 065   | 069   | 046   | 066   | 066   | 048   | 063   | 072   | 056   | 066   | 058   |          | 074   | 047   | 065   | 059 |     |     |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06055 | 06055 | 06071 | 06077 | 06079 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099    | 06099 | 06099 | 06099 |     |     |     |
| Congestion   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1     | 4.0 |     |     |
| Hematopoietic Cell Proliferation                       |             |       | 4     |       |       | 1     | 3     | 1     | 1     |       |       |       |       |       |       |       |       |       |       | 1     |       |          |       |       |       | 13  | 2.0 |     |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       | 2     | 2     |       |       |          |       |       |       | 6   | 2.2 |     |
| Pigmentation   | 1           |       |       |       |       |       |       |       |       |       |       | 4     | 1     | 3     |       |       | 1     |       | 1     | 2     |       | 4        | 1     | 1     | 1     | 3   | 21  | 2.0 |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 1.0 |
| Thymus   | +           | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 47  |     |     |
| Atrophy  | 4           |       | 4     | 4     | 4     |       | 4     | 4     | 4     | 4     | 4     |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 43  | 3.9 |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 1.0 |
| <b>INTEGUMENTARY SYSTEM</b>                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     |     |     |
| Mammary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 50  |     |     |
| Galactocele  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   |     |
| Hyperplasia, Lobular                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 2.0 |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 1.0 |
| Alveolus, Degeneration                                 |             | 4     |       | 2     | 4     |       |       | 4     | 4     | 2     |       |       | 4     |       | 3     |       | 4     |       | 4     |       |       | 3        | 4     | 3     |       |     | 31  | 3.5 |
| Alveolus, Dilatation                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       | 2     |       |          |       |       |       | 2   | 7   | 2.4 |
| Duct, Dilatation                                       |             |       |       |       |       |       |       |       |       |       | 2     |       | 4     |       |       |       |       |       |       | 3     |       | 2        |       |       |       | 2   | 10  | 2.6 |
| Skin   |             |       |       |       |       | +     | +     |       | +     | +     |       |       |       |       |       |       | +     |       |       | +     |       |          | +     | +     |       | 15  |     |     |
| Cyst Epithelial Inclusion                              |             |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |          |       | X     |       |     | 4   |     |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 4.0 |
| Foreign Body   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   |     |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 4.0 |
| Inflammation, Granulomatous                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 4.0 |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 4.0 |
| Ulcer  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |     | 1   | 4.0 |
| Epithelium, Foot, Hyperplasia                          |             |       |       |       |       |       |       |       |       |       | 4     |       | 4     |       |       |       |       |       |       |       |       |          |       |       |       |     | 3   | 4.0 |
| Foot, Fibrosis   |             |       |       |       |       |       |       |       |       |       | 4     |       | 4     |       |       |       |       |       |       |       |       |          |       |       |       |     | 3   | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|  | 0724        | 0541  | 0558  | 0444  | 0668  | 0449  | 0661  | 0778  | 0558  | 0778  | 0669  | 0449  | 0660  | 0664  | 0667  | 0446  | 0663  | 0772  | 0557  | 0664  | 0558  | 0772  | 0445  | 0665  |          | 0559  |
| ANIMAL ID  | 06032       | 06041 | 06044 | 06055 | 06051 | 06077 | 06077 | 06077 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099 | 06099    | 06099 |

|                           |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Axon, Degeneration        | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 1.5 |
| Peripheral Nerve, Sciatic | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6     |
| Peripheral Nerve, Tibial  | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6     |
| Spinal Cord, Cervical     | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6     |
| Spinal Cord, Lumbar       | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6     |
| Axon, Degeneration        | 1 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 1.2 |
| Spinal Cord, Thoracic     | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6     |
| Axon, Degeneration        | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0 |

**RESPIRATORY SYSTEM**

|                                   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Lung                              | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 40     |
| Congestion                        |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 4.0  |
| Foreign Body                      |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2      |
| Hemorrhage                        |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 4.0  |
| Infiltration Cellular, Histiocyte | 2 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 14 1.7 |
| Inflammation, Granulomatous       | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 4.0  |
| Inflammation, Chronic Active      | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 2.5  |
| Metaplasia, Osseous               | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0  |
| Mineralization                    |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Alveolar Epithelium, Hyperplasia  |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Nose                              | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 37     |
| Autolysis                         | 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 4.0  |
| Fibrous Osteodystrophy            | 3   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 3.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |      |        |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|------|--------|-------|
|  | 0724        | 0751  | 0758  | 0744  | 0766  | 0744  | 0766  | 0777  | 0755  | 0776  | 0766  | 0744  | 0766  | 0766  | 0744  | 0766  | 0777  | 0755  | 0766  |          | 0744  | 0766  | 0755  | 0777  | 0744  | 0766  | 0755 |        |       |
| ANIMAL ID  | 06032       | 06641 | 06648 | 06641 | 06622 | 06771 | 06772 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 | 06779    | 06779 | 06779 | 06779 | 06779 | 06779 | 06779 |      |        |       |
| Foreign Body   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | X    | 1      |       |
| Inflammation, Suppurative                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |      | 2      | 2 2.0 |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |          |       |       |       |       |       |       |      |        | 1 3.0 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |             |       |       | 2     |       | 4     |       |       |       |       |       |       | 3     | 2     | 3     | 4     |       |       |       |          | 3     | 4     |       |       |       |       | 3    | 15 2.8 |       |
| Posterior To Upper Incisor, Malformation               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |          |       |       |       |       |       |       |      | 1      |       |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 4     |       |       |       |       |      | 5 2.6  |       |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |             |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 2     |       |      | 5 2.2  |       |
| Transitional Epithelium, Accumulation, Hyaline Droplet |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |      | 1 3.0  |       |
| Trachea  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |      |        | 32    |

### SPECIAL SENSES SYSTEM

|                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Ear            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |
| Eye            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |
| Cataract       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0 |
| Zymbal's Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1     |

### URINARY SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |       |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|-------|
| Kidney                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       | 50    |
| Accumulation, Hyaline Droplet            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 2 4.0 |       |
| Casts Protein                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       | 1 1.0 |
| Hemorrhage                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       | 1 4.0 |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       | 8 1.5 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 250.0StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               | 0  | 0   | 0 | 0   | 0 | 0 | 0   |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|----|-----|---|-----|---|---|-----|---|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|----|----|-----|
|  | ANIMAL ID   | 7 | 5 | 5 | 4 | 6 | 4 | 6 | 7 | 5 | 7 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 7 | 5 | 6 | 5 | 7 | 4 | 6 | 5 | 7 | 4 | 6               | 5  | 7   | 4 | 6   | 5 | 7 | 4   | 6 | 5   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 2 | 4 | 1 | 4 | 8 | 9 | 5 | 2 | 5 | 2 | 6 | 9 | 1 | 4 | 8 | 6 | 3 | 2 | 6 | 6 | 8 | 2 | 7 | 0 | 7 | 0 | 9 | 0               | 7  | 0   | 9 | 0   | 7 | 0 | 9   | 0 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 4 | 1 | 8 | 4 | 9 | 1 | 8 | 8 | 9 | 5 | 9 | 9 | 0 | 4 | 7 | 9 | 1 | 7 | 7 | 4 | 9 | 7 | 4 | 9 | 7 | 5 | 5 | 1               | 5  | 1   | 5 | 1   | 5 | 1 | 5   | 1 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               | 0  | 0   | 0 | 0   | 0 | 0 | 0   | 0 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9               | 9  | 9   | 9 | 9   | 9 | 9 | 9   | 9 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7               | 7  | 7   | 7 | 7   | 7 | 7 | 7   | 7 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 3 | 4 | 4 | 5 | 5 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9               | 9  | 9   | 9 | 9   | 9 | 9 | 9   | 9 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1               | 2  | 1   | 2 | 1   | 2 | 1 | 2   | 1 | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |    |     |   |     |   |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Mineralization   |             |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3               |    |     | 2 | 3.0 |   |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Nephropathy  | 4           |   |   | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 1 | 3 | 4 | 2 | 3 | 3 | 4 | 2 | 4 | 2 | 1 | 3 | 2 | 4 | 4 |   |                 | 48 | 3.1 |   |     |   |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Polyarteritis  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   | 2 | 3.0 |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Polycystic Kidney                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   | 1 | 4.0 |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Thrombosis   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   | 1 |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Cortex, Cyst   | X           |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    | X   | X | X   | X |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 12 |   |    |    |     |
| Pelvis, Dilatation                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     | 2 | 2.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Pelvis, Inflammation, Chronic Active                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     | 1 | 2.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Renal Tubule, Cyst                                     | X           |   |   | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    | X   | X |     |   |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   | 21 |    |     |
| Renal Tubule, Hyperplasia, Atypical                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     | 1 | 3.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Transitional Epithelium, Hyperplasia                   | 2           |   |   | 2 |   |   | 4 | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     |   |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 2 | 2  | 12 | 1.8 |
| Urinary Bladder  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     | 4 |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |
| Lumen, Dilatation                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |    |     |   |     |   |   |     | 4 | 3.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |    |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|  | 0727        | 0678 | 0728 | 0556 | 0777 | 0661 | 0449 | 0776 | 0446 | 0558 | 0779 | 0770 | 0772 | 0556 | 0637 | 0442 | 0559 | 0443 | 0771 | 0664 |           |                    | 0775 | 0558 | 0779 |
|  | 0185        | 0188 | 0186 | 0182 | 0181 | 0181 | 0188 | 0188 | 0188 | 0189 | 0189 | 0181 | 0182 | 0184 | 0184 | 0184 | 0184 | 0184 | 0184 | 0184 | 0186      | 0186               | 0186 | 0186 | 0186 |

**ALIMENTARY SYSTEM**

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus                               | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Cecum                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Colon                  | + + + + + A + + A + + + + + + + A +         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Ileum                  | A + + + + A + + A + + + + A A +             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liver                                   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angiectasis                             | 2 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Basophilic Focus                        | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clear Cell Focus                        | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic                    | 2 2 2 2 1 1 1 2 2 1 1 2 1 1 2 1 2 2         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fatty Change                            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation        | 1 X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hepatodiaphragmatic Nodule              | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Mononuclear Cell | 1 2 1 1 1 1 1 1 1 2 2 1 1 1 1 1 1 2 2       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic                   | 2 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polyarteritis                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tension Lipidosis                       | 2 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vacuolization Cytoplasmic               | 1 2 2 1 1 2 1 3 1 2 2 3 2                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bile Duct, Hyperplasia                  | 2 2 2 1 1 2 1 3 1 2 2 3 2                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biliary Tract, Cyst                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biliary Tract, Fibrosis                 | 1 2 1 1 1 2 1 1 2 1 1 2 1                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hepatocyte, Necrosis                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oval Cell, Hyperplasia                  | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |   |   |  |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|---|---|--|--|
|  | 7           | 6 | 7 | 5 | 7 | 7 | 6 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 5 | 6 | 4 | 5 | 4 | 7 | 6 | 7 | 7 | 5 |           |                    | 5 |   |  |  |
|  | 2           | 7 | 8 | 8 | 5 | 2 | 0 | 5 | 9 | 2 | 6 | 6 | 0 | 2 | 3 | 2 | 6 | 3 | 5 | 5 | 3 | 0 | 4 | 2 | 0         | 1                  | 9 | 4 |  |  |
|  | 7           | 8 | 8 | 6 | 7 | 7 | 1 | 9 | 6 | 6 | 8 | 9 | 0 | 7 | 7 | 2 | 4 | 4 | 9 | 3 | 1 | 9 | 5 | 5 | 8         | 4                  |   |   |  |  |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                  | 0 | 0 |  |  |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6         | 6                  | 6 | 6 |  |  |
|  | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1         | 1                  | 1 | 1 |  |  |
|  | 5           | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 8         | 8                  | 9 | 9 |  |  |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         | 2                  | 1 | 2 |  |  |

Mesentery  
Fat, Necrosis

Oral Mucosa

Pancreas  
Cyst Multilocular  
Infiltration Cellular, Lymphocyte  
Lipomatosis  
Pigmentation  
Polyarteritis  
Thrombosis  
Acinus, Degeneration  
Artery, Mineralization

Stomach, Forestomach  
Inflammation, Chronic Active  
Epithelium, Hyperplasia

Stomach, Glandular  
Mineralization  
Epithelium, Hyperplasia

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**CARDIOVASCULAR SYSTEM**

Blood Vessel  
Mineralization

Heart  
Cardiomyopathy

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...)    |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>5<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>0<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>9<br>9      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>6      | 0<br>5<br>0<br>8      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>7      | 0<br>5<br>6<br>7      | 0<br>4<br>5<br>4      | 0<br>5<br>5<br>9      | 0<br>4<br>3<br>3      | 0<br>7<br>0<br>1      | 0<br>6<br>4<br>9      |                       |                       | 0<br>7<br>2<br>5      | 0<br>7<br>0<br>5      | 0<br>5<br>1<br>8      |
|  | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>7<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>8<br>2 | 0<br>1<br>8<br>9<br>1 | 0<br>1<br>8<br>9<br>1 | 0<br>4<br>8<br>9<br>1 | 0<br>4<br>8<br>9<br>2 | 0<br>4<br>0<br>1<br>2 | 0<br>4<br>0<br>1<br>2 | 0<br>4<br>0<br>3<br>1 | 0<br>4<br>0<br>4<br>1 | 0<br>4<br>0<br>4<br>2 | 0<br>4<br>0<br>4<br>1 | 0<br>4<br>0<br>5<br>2 | 0<br>4<br>0<br>5<br>1 | 0<br>6<br>1<br>7<br>2 | 0<br>6<br>1<br>7<br>1 | 0<br>6<br>1<br>8<br>2 | 0<br>6<br>1<br>8<br>1 | 0<br>6<br>1<br>8<br>9 |

Metaplasia, Osseous  
Mineralization  
Thrombosis  
Endocardium, Hyperplasia

2 1 3 3 4 4

ENDOCRINE SYSTEM

Adrenal Cortex  
Accessory Adrenal Cortical Nodule  
Angiectasis  
Congestion  
Degeneration, Cystic  
Hyperplasia  
Hypertrophy  
Necrosis  
Vacuolization Cytoplasmic

+  
3 3 4 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

Adrenal Medulla  
Degeneration, Cystic  
Hyperplasia

+  
3 1 4 1 2 1 2 2 2 1 2 2 2 1 2 2 2 2 2 2 2 2 2

Islets, Pancreatic  
Hyperplasia

+  
4

Parathyroid Gland  
Hyperplasia

+  
4 2 2 3 2 2 4 2 2 3 3 4 2 2 4 4

Pituitary Gland  
Angiectasis  
Fibrosis

+  
4 4 4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|---|
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |   |   |   |
|  |  | 7           | 6 | 7 | 5 | 7 | 7 | 6 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 5 | 6 | 4 | 5 | 4 | 7 |                    | 6 | 7 | 7 | 5 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |  | 2           | 7 | 2 | 5 | 2 | 0 | 5 | 9 | 2 | 6 | 0 | 2 | 3 | 2 | 6 | 3 | 5 | 5 | 3 | 0 | 4                  | 2 | 0 | 1 | 9 |
|  |  | 7           | 8 | 8 | 6 | 7 | 7 | 1 | 9 | 6 | 6 | 8 | 9 | 0 | 7 | 7 | 2 | 4 | 9 | 3 | 1 | 9                  | 5 | 5 | 8 | 4 |
| <b>F1 2500.StDose M</b>                    |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 | 0 |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6                  | 6 | 6 | 6 | 6 |
|  |  | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1                  | 1 | 1 | 1 |   |
|  |  | 5           | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7                  | 8 | 8 | 9 |   |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 2 |   |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Hemorrhage                       |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mineralization                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pars Distalis, Cyst              | X |   |   |   |   |   |   |   |   | X |   | X | X |   |   |   |   | X |   |   | X |   |   |   |  |
| Pars Distalis, Cyst Multilocular |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pars Distalis, Hyperplasia       | 1 | 2 | 2 |   |   |   | 4 |   | 2 | 3 | 3 |   |   |   |   |   |   |   |   | 3 | 2 | 3 |   |   |  |
| Pars Distalis, Hypertrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pars Intermedia, Cyst            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Thyroid Gland                    | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Ultimobranchial Cyst             |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |
| C-cell, Hyperplasia              | 2 |   | 2 | 1 |   | 3 |   | 1 | 2 |   | 1 | 1 | 1 |   |   |   |   |   | 2 |   |   | 1 |   |   |  |
| Follicular Cell, Hyperplasia     |   |   |   |   | 2 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumen, Dilatation                 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Exfoliated Germ Cell              | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 3 | 2 |   | 3 | 3 |
| Hypospermia                       | 2 |   |   | 3 |   | 4 |   |   | 4 |   |   |   |   |   |   | 4 |   | 3 |   | 3 |   |   |   |   |   | 3 |
| Infiltration Cellular, Lymphocyte | 2 |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   | 1 | 1 | 1 |   |   |
| Polyarteritis                     | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |
| Preputial Gland                   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   | + |   |   | + |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | ANIMAL ID | males<br>(cont...) |          |          |          |          |
|--|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|--------------------|----------|----------|----------|----------|
|  | 07<br>27    | 06<br>78 | 07<br>28 | 05<br>56 | 07<br>27 | 07<br>71 | 06<br>61 | 04<br>49 | 07<br>79 | 04<br>46 | 05<br>58 | 07<br>79 | 07<br>70 | 03<br>32 | 07<br>72 | 05<br>56 | 06<br>63 | 04<br>45 | 05<br>53 | 07<br>70 |           |                    | 06<br>64 | 07<br>75 | 07<br>75 | 05<br>58 |
| Cyst   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |
| Hyperkeratosis   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |
| Inflammation, Suppurative                              |             |          |          |          |          |          |          |          |          |          |          |          |          | 2        |          |          |          |          | 3        |          | 3         |                    | 2        |          |          | 4        |
| Necrosis   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |
| Duct, Dilatation                                       |             |          |          |          |          |          |          |          |          |          |          |          |          | 4        |          |          |          | 3        |          | 3        |           | 4                  |          | 2        |          | 4        |
| Prostate, Dorsal/lateral Lobe                          | +           | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +         | +                  | +        | +        | +        |          |
| Atrophy  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |
| Cyst, Mucinous   |             | X        |          |          |          |          | X        |          | X        |          |          |          |          |          |          |          |          |          |          | X        |           |                    |          |          | X        |          |
| Fibrosis   |             |          |          |          |          |          | 2        |          |          |          |          |          |          |          |          |          | 3        |          |          |          |           | 1                  |          |          | 1        |          |
| Hemorrhage   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          | 4        |          |          |          |          |           |                    |          |          |          |          |
| Infiltration Cellular, Lymphocyte                      | 1           |          | 1        | 1        | 1        | 2        | 2        |          | 2        |          |          | 1        | 1        | 1        | 1        | 3        |          |          | 1        | 2        |           | 1                  | 1        | 1        | 1        |          |
| Inflammation, Suppurative                              | 2           | 2        | 3        | 3        | 2        | 3        | 2        | 2        | 2        | 2        | 1        | 1        | 2        | 1        | 3        | 3        |          | 1        | 1        | 3        | 1         | 1                  | 2        | 2        | 2        |          |
| Mineralization   |             |          |          |          |          |          |          |          |          |          | 1        |          |          |          | 1        |          |          |          |          |          |           |                    |          |          |          |          |
| Prostate, Ventral Lobe                                 | +           | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +         | +                  | +        | +        |          |          |
| Atrophy  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          | 2        |          |
| Fibrosis   |             |          |          |          |          |          | 2        |          | 2        |          |          |          |          |          |          |          |          |          | 1        | 2        |           | 2                  |          |          |          |          |
| Hemorrhage   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          | 4        |          |          |          |          |           |                    |          |          |          |          |
| Infiltration Cellular, Lymphocyte                      |             |          |          | 1        |          |          |          |          | 1        | 1        |          |          |          | 1        |          | 1        | 3        |          | 1        | 1        | 2         |                    | 1        |          |          |          |
| Inflammation, Suppurative                              |             |          |          |          |          |          |          | 2        | 2        |          |          |          | 1        |          | 1        |          | 4        |          |          |          |           |                    |          |          |          |          |
| Mineralization   |             |          |          |          |          |          | 3        |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    | 2        |          |          |          |
| Polyarteritis  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | 1        |           |                    |          |          |          |          |
| Epithelium, Hyperplasia                                | 2           |          |          |          |          |          |          | 1        |          | 2        |          |          | 2        |          |          |          |          | 2        |          |          |           | 2                  | 2        |          |          |          |
| Seminal Vesicle  | +           | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +        | +         | +                  | +        | +        |          |          |
| Atrophy  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          | 3        |          |
| Fibrosis   |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |
| Inflammation, Chronic                                  |             |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | 1        |           |                    |          |          |          |          |
| Inflammation, Chronic Active                           |             |          |          |          |          |          |          |          |          | 2        |          |          |          |          |          |          |          |          |          |          |           |                    |          |          |          |          |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | males<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|
|  | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>5<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>0<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>9<br>2      | 0<br>7<br>6<br>6      | 0<br>4<br>2<br>6      | 0<br>5<br>0<br>8      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>7      | 0<br>5<br>6<br>3      | 0<br>6<br>3<br>5      | 0<br>4<br>5<br>4      | 0<br>4<br>5<br>3      | 0<br>7<br>0<br>1      | 0<br>6<br>4<br>5      | 0<br>7<br>2<br>5      | 0<br>7<br>0<br>5      | 0<br>5<br>1<br>8      | 0<br>5<br>9<br>4      |                       |                    |
|  | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>2 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>7<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>8<br>2 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>9<br>2 | 0<br>1<br>8<br>9<br>1 | 0<br>4<br>8<br>1<br>2 | 0<br>4<br>8<br>1<br>2 | 0<br>4<br>0<br>2<br>1 | 0<br>4<br>0<br>3<br>2 | 0<br>4<br>0<br>3<br>1 | 0<br>4<br>0<br>4<br>2 | 0<br>4<br>0<br>4<br>1 | 0<br>4<br>0<br>5<br>2 | 0<br>4<br>0<br>5<br>1 | 0<br>6<br>1<br>7<br>2 | 0<br>6<br>1<br>7<br>1 | 0<br>6<br>8<br>8<br>1 | 0<br>6<br>8<br>8<br>2 | 0<br>6<br>9<br>8<br>1 |                    |

Polyarteritis Epithelium, Hyperplasia Lumen, Dilatation 2 2 1

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Polyarteritis                     | 4 |   | 2 |   |   |   |   |   | 4 |   |   |   |   | 1 |   | 2 |   | 4 | 1 | 4 | 2 | 2 | 3 | 3 |   |
| Seminiferous Tubule, Degeneration | 4 |   |   | 3 | 1 | 4 | 1 |   | 4 |   | 1 | 2 | 1 |   | 2 | 4 |   | 3 | 1 | 4 | 2 | 2 | 3 | 3 | 4 |
| Seminiferous Tubule, Dilatation   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Myeloid Cell, Hyperplasia                       | 4 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                      | + |   | + |   | + | + |   | + |   |   |   |   | + |   | + |   |   |   |   | + | + | + |   | + |   |
| Brachial, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |
| Brachial, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |
| Brachial, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |
| Inguinal, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                    |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 4 |
| Lumbar, Hyperplasia, Lymphoid                   |   |   |   |   |   |   | 4 |   | 3 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell      |   |   |   |   |   |   | 3 |   | 2 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Degeneration, Cystic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Degeneration, Cystic                     | 3 |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 | 4 | 4 |   | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | males<br>(cont...)    |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>5<br>6      | 0<br>7<br>2<br>7      | 0<br>7<br>0<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>9<br>9      | 0<br>7<br>6<br>6      | 0<br>4<br>2<br>6      | 0<br>5<br>0<br>8      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>7      | 0<br>5<br>6<br>7      | 0<br>6<br>3<br>2      | 0<br>4<br>5<br>4      | 0<br>5<br>5<br>3      | 0<br>4<br>3<br>0      | 0<br>7<br>4<br>9      | 0<br>6<br>2<br>5      | 0<br>7<br>0<br>5      | 0<br>5<br>1<br>8      |                       | 0<br>5<br>9<br>4      |
|  | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>5<br>1 | 0<br>1<br>8<br>6<br>1 | 0<br>1<br>8<br>6<br>2 | 0<br>1<br>8<br>7<br>1 | 0<br>1<br>8<br>7<br>2 | 0<br>1<br>8<br>8<br>1 | 0<br>1<br>8<br>8<br>2 | 0<br>1<br>8<br>8<br>2 | 0<br>1<br>8<br>9<br>1 | 0<br>4<br>8<br>9<br>1 | 0<br>4<br>0<br>1<br>2 | 0<br>4<br>0<br>2<br>2 | 0<br>4<br>0<br>3<br>2 | 0<br>4<br>0<br>3<br>1 | 0<br>4<br>0<br>3<br>2 | 0<br>4<br>0<br>4<br>1 | 0<br>4<br>0<br>5<br>2 | 0<br>4<br>0<br>5<br>1 | 0<br>6<br>1<br>5<br>2 | 0<br>6<br>1<br>7<br>2 | 0<br>6<br>1<br>8<br>1 | 0<br>6<br>1<br>8<br>2 | 0<br>6<br>1<br>8<br>2 | 0<br>6<br>1<br>9<br>1 |

Renal, Hemorrhage  
 Renal, Hyperplasia, Lymphoid  
 Renal, Infiltration Cellular, Plasma Cell  
 Renal, Pigmentation

2 2

3

Lymph Node, Mandibular  
 Degeneration, Cystic  
 Hyperplasia, Lymphoid  
 Infiltration Cellular, Plasma Cell

+  
 3 1 1 3 2 2 1 2 2 1 1 1 2 1 1 1 2 4 4 2 4 4  
 4  
 4 3 4 3 3 3

Lymph Node, Mesenteric

+

Spleen  
 Hematopoietic Cell Proliferation  
 Hyperplasia, Lymphoid  
 Pigmentation  
 Polyarteritis

+  
 3 1 1 3 2 2 1 2 2 1 1 2 1 1 1 2 4 4 2 4 4  
 2 2 4 1 2 1 2 1 1 1 1 1 1 1 1 2 2 2  
 1

Thymus  
 Atrophy  
 Fibrosis  
 Epithelial Cell, Hyperplasia

+ M +  
 4  
 4  
 4

**INTEGUMENTARY SYSTEM**

Mammary Gland  
 Galactocele  
 Alveolus, Degeneration  
 Alveolus, Dilatation  
 Duct, Dilatation

+ + + + + + + + + + + + + + + M + + + + + + + + +  
 4 3 2 4 2 4 4 4 4 4 4 3 3 4 4 4 4 3 4  
 2 2 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  
 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |   |   |   |
| ANIMAL ID  |  | 7           | 6 | 7 | 5 | 7 | 7 | 6 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 5 | 6 | 4 | 5 | 4 | 7 |                    | 6 | 7 | 7 | 5 |
|  |  | 2           | 7 | 2 | 5 | 2 | 0 | 5 | 9 | 2 | 6 | 0 | 2 | 3 | 2 | 6 | 3 | 5 | 5 | 3 | 0 | 4                  | 2 | 0 | 1 | 8 |
|  |  | 7           | 8 | 8 | 6 | 7 | 7 | 1 | 9 | 6 | 6 | 8 | 9 | 0 | 7 | 7 | 2 | 4 | 9 | 3 | 1 | 9                  | 5 | 5 | 8 | 4 |
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 | 0 |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6                  | 6 | 6 | 6 | 6 |
|  |  | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1                  | 1 | 1 | 1 |   |
|  |  | 5           | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7                  | 8 | 8 | 9 |   |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 2 | 1 |

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Skin  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst Epithelial Inclusion                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Edema   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Granulomatous Epithelium, Hyperplasia |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium, Foot, Hyperplasia                       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Edema   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Fibrosis                                      |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Inflammation, Chronic Active                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Necrosis                                      |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Ulcer   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

MUSCULOSKELETAL SYSTEM

|                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rib, Hyperostosis      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Femur            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Osteodystrophy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Osteopetrosis          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skeletal Muscle        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

NERVOUS SYSTEM

|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Brain, Brain Stem |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compression       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gliosis           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|--|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M |  | 0727        | 0678  | 0728  | 0556  | 0777  | 0661  | 0449  | 0779  | 0446  | 0558  | 0779  | 0442  | 0330  | 0227  | 0566  | 0435  | 0559  | 0433  | 0771  | 0669  | 0775  | 0558  | 0779  | 0554  |                    |
| ANIMAL ID  |  | 01851       | 01852 | 01853 | 01854 | 01855 | 01856 | 01857 | 01858 | 01859 | 01860 | 01861 | 01862 | 01863 | 01864 | 01865 | 01866 | 01867 | 01868 | 01869 | 01870 | 01871 | 01872 | 01873 | 01874 |                    |

Vacuolization Cytoplasmic

2

Brain, Cerebellum

+ +

Brain, Cerebrum

+ +

- Gliosis
- Hemorrhage
- Necrosis
- Pigmentation
- Thrombosis
- Ventricle, Dilatation

1

Nerve Trigeminal

+ + + +

Axon, Degeneration

1 1 1 1

Peripheral Nerve, Sciatic

+ + + +

Peripheral Nerve, Tibial

+ + + +

Spinal Cord, Cervical

+ + + +

Axon, Degeneration

2

Spinal Cord, Lumbar

+ + + +

Axon, Degeneration

4 1 + 2

Spinal Cord, Thoracic

+ + + +

Axon, Degeneration

2

RESPIRATORY SYSTEM

Lung

+ +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | males<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|
|  | 7           | 6 | 7 | 5 | 7 | 7 | 6 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 5 | 6 | 4 | 5 | 4 | 7 | 6 | 7 | 7 | 5 | 5 |           |                    |
|  | 2           | 7 | 8 | 2 | 5 | 2 | 0 | 5 | 9 | 2 | 6 | 0 | 2 | 3 | 2 | 6 | 3 | 5 | 5 | 3 | 0 | 4 | 2 | 0 | 1 | 8         | 9                  |
|  | 7           | 8 | 8 | 6 | 7 | 7 | 1 | 9 | 6 | 6 | 8 | 9 | 0 | 7 | 7 | 2 | 4 | 9 | 3 | 1 | 9 | 5 | 5 | 8 | 4 | 1         | 9                  |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1         | 1                  |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 8         | 6                  |
|  | 8           | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 5         | 1                  |
|  | 5           | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 1         | 1                  |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2         | 1                  |

|                                   |   |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |
|-----------------------------------|---|--|--|--|---|--|--|--|--|--|--|--|--|---|---|---|--|--|--|--|--|--|--|--|---|--|--|--|---|---|
| Congestion                        |   |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  | 4 |  |  |  |   |   |
| Fibrosis                          | 2 |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |
| Hemorrhage                        |   |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |
| Infiltration Cellular, Histiocyte | 2 |  |  |  |   |  |  |  |  |  |  |  |  | 2 | 1 | 1 |  |  |  |  |  |  |  |  |   |  |  |  | 1 | 1 |
| Inflammation, Granulomatous       |   |  |  |  | 2 |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |
| Inflammation, Chronic Active      | 1 |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |
| Alveolar Epithelium, Hyperplasia  |   |  |  |  |   |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |  |   |  |  |  |   |   |

|   |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
|---|--|---|--|---|---|---|---|---|--|---|---|--|---|--|--|---|---|---|---|---|---|---|--|--|--|--|---|---|---|--|
| Nose  |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Exudate   |  | + |  | + |   | + | + | + |  | + | + |  |   |  |  | + | + | + | + | + | + | + |  |  |  |  | + | + | + |  |
| Fibrous Osteodystrophy                                |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Foreign Body  |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Inflammation, Suppurative                             |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Inflammation, Chronic Active                          |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |  |   |  |   |   |   |   |   |  |   |   |  | 2 |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   | 4 |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |  |   |  |   |   |   |   |   |  |   |   |  | 2 |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   | 2 |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |  |   |  |   | 2 |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Respiratory Epithelium, Ulcer                         |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |
| Trachea   |  |   |  |   |   |   |   |   |  |   |   |  |   |  |  |   |   |   |   |   |   |   |  |  |  |  |   |   |   |  |

### SPECIAL SENSES SYSTEM

Eye  
 Cornea, Inflammation, Chronic Active  
 Cornea, Mineralization

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |   | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 5 | 6 | 4 | 5 | 4 | 7 | 6 | 7 | 7 | 5 | 5 |
|  |   | 2 | 7 | 2 | 5 | 2 | 0 | 5 | 9 | 2 | 6 | 0 | 2 | 3 | 2 | 6 | 3 | 5 | 5 | 3 | 0 | 4 | 2 | 0 | 1 | 9 |
|  |   | 7 | 8 | 8 | 6 | 7 | 7 | 1 | 9 | 6 | 6 | 8 | 9 | 0 | 7 | 7 | 2 | 4 | 9 | 3 | 1 | 9 | 5 | 5 | 8 | 4 |
| <b>F1 2500.StDose M</b>                    |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 |
|  |   | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 |
|  | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |

males  
(cont...)

URINARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Kidney                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Accumulation, Hyaline Droplet             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Casts Protein                             |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Infiltration Cellular, Polymorphonuclear  |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Mineralization                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 | 4 |   |  |
| Nephropathy                               | 4 | 4 | 4 | 4 | 2 | 3 |   | 2 | 4 | 1 | 2 | 4 | 3 | 4 | 3 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |  |
| Pigmentation                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Polyarteritis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 4 |   |   |   |   |   |  |
| Polycystic Kidney                         |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Cortex, Cyst                              |   | X | X |   |   |   | X |   |   |   |   |   | X |   | X |   | X | X |   |   |   |   |   |   |   |  |
| Pelvis, Infiltration Cellular, Lymphocyte |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Renal Tubule, Cyst                        | X | X | X |   |   |   | X | X |   | X |   | X | X |   |   | X |   | X |   |   |   |   | X |   |   |  |
| Transitional Epithelium, Hyperplasia      |   |   | 1 |   |   |   | 2 |   |   |   |   |   | 2 |   | 1 |   | 2 |   | 2 | 2 |   |   | 2 |   |   |  |
| Urinary Bladder                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lumen, Dilatation                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   |   |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|  | 0708        | 0708  | 0625  | 0728  | 0779  | 0777  | 0676  | 0777  | 0774  | 0478  | 0650  | 0145  | 0770  | 0664  | 0578  | 0763  | 0669  | 0772  | 0772  | 0772  |          | 0778  | 0778  | 0665  |
| ANIMAL ID  | 06192       | 06200 | 06001 | 06011 | 06055 | 06055 | 06066 | 06066 | 06077 | 06077 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088 | 06088    | 06088 | 06088 | 06088 |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     |       |

ALIMENTARY SYSTEM

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Esophagus                               | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 35     |
| Intestine Large, Cecum                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1      |
| Intestine Large, Colon                  | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 29     |
| Intestine Small, Ileum                  | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 26     |
| Liver                                   | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50     |
| Angiectasis                             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 2.3  |
| Basophilic Focus                        | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11     |
| Clear Cell Focus                        | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10     |
| Cyst                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1      |
| Degeneration, Cystic                    | 1 2 2 3 2 1 2 2 2 1                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 30 1.6 |
| Fatty Change                            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 4.0  |
| Hematopoietic Cell Proliferation        | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 1.0  |
| Hepatodiaphragmatic Nodule              | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4      |
| Infiltration Cellular, Mononuclear Cell | 2 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 33 1.3 |
| Inflammation, Chronic                   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Polyarteritis                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0  |
| Tension Lipidosis                       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 2.0  |
| Vacuolization Cytoplasmic               | 2 1 2 1                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 12 1.5 |
| Bile Duct, Hyperplasia                  | 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 20 1.8 |
| Biliary Tract, Cyst                     | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2      |
| Biliary Tract, Fibrosis                 | 2 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 17 1.3 |
| Hepatocyte, Necrosis                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 1.0  |
| Oval Cell, Hyperplasia                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                              |                  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |
|------------------------------|------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|
|                              |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0 |   |
| <b>SPRAGUE DAWLEY (NCTR)</b> | <b>RATS MALE</b> | 7           | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 4 | 7 | 6 | 1 | 5 | 7 | 6 | 4 | 5 | 6 | 6 | 7        | 7 | 7 | 6 |
|                              |                  | 0           | 2 | 2 | 2 | 2 | 0 | 1 | 0 | 2 | 8 | 0 | 5 | 4 | 5 | 0 | 0 | 2 | 8 | 3 | 9 | 2        | 2 | 2 | 2 |
| <b>F1 2500.StDose M</b>      | <b>ANIMAL ID</b> | 8           | 5 | 5 | 8 | 9 | 7 | 6 | 7 | 4 | 3 | 9 | 3 | 6 | 2 | 8 | 3 | 7 | 9 | 2 | 3 | 8        | 8 | 7 | 5 |
|                              |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 |
|                              |                  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9        | 9 | 9 | 9 |
|                              |                  | 1           | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 9 | 9 | 9 | 9        | 9 | 9 | 9 |
|                              |                  | 9           | 0 | 0 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 0 | 1 | 1 | 2        | 2 | 3 | 3 |
|                              |                  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 2 | 1 | 2 |

Mesentery + 1  
 Fat, Necrosis 4 1 4.0

Oral Mucosa 1

Pancreas + 50  
 Cyst Multilocular 1 1  
 Infiltration Cellular, Lymphocyte 1 1 1 1 1 2 1 2 2 2 1 2 3 1 1 2 1 1 2 4 2 2 40 1.7  
 Lipomatosis 4 2 3 10 3.2  
 Pigmentation 1 1 1 1 1 23 1.3  
 Polyarteritis 2 5 2.4  
 Thrombosis X 1  
 Acinus, Degeneration 1 1 2 2 2 2 3 3 2 2 2 1 1 1 2 4 1 4 4 41 2.2  
 Artery, Mineralization 4 1 4.0

Stomach, Forestomach + + + + + + + + + A + + + + + + + + + 34  
 Inflammation, Chronic Active 2 1 2.0  
 Epithelium, Hyperplasia 4 1 4.0

Stomach, Glandular + + + + + + + + + A + + + + + + + + + 33  
 Mineralization 3 4 3 7 2.9  
 Epithelium, Hyperplasia 3 4 4 3 3.7

CARDIOVASCULAR SYSTEM

Blood Vessel + 50  
 Mineralization 2 3 4 4 4 7 3.6

Heart + 50  
 Cardiomyopathy 1 1 2 3 4 3 4 1 1 3 3 1 4 3 3 2 1 3 3 4 2 2 4 47 2.4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|  | ANIMAL ID   | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 4 | 7 | 6 | 1 | 5 | 7 | 6 | 4 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 6 |          |
|  |             | 8 | 5 | 5 | 8 | 9 | 7 | 6 | 7 | 4 | 3 | 9 | 3 | 6 | 2 | 8 | 3 | 7 | 9 | 2 | 3 | 8 | 8 | 2 | 2 | 8 | 5 |          |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |             | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |          |
|  |             | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |          |
|  |             | 9 | 0 | 0 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 |          |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |          |

|                                    |  |  |   |  |  |  |  |   |   |   |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   |       |
|------------------------------------|--|--|---|--|--|--|--|---|---|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Metaplasia, Osseous Mineralization |  |  |   |  |  |  |  | 2 | 4 |   |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 | 3 2.0 |
| Thrombosis                         |  |  | X |  |  |  |  |   |   | X |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   | 2     |
| Endocardium, Hyperplasia           |  |  |   |  |  |  |  |   |   | 4 |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |   | 1 4.0 |

### ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |    | 1      |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 3.0  |
| Congestion                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Degeneration, Cystic              | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.3  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 2 |    | 5 1.6  |
| Hypertrophy                       | 2 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.7  |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |    | 1 1.0  |
| Vacuolization Cytoplasmic         | 2 |   | 1 | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 1 | 2 |   |   | 2 |    | 18 1.7 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   | 1 |   |   | 3 |   |   | 2 | 1 |   |   |   |   | 1 | 4 | 1 | 1 | 4 |    | 17 1.9 |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Hyperplasia                       | 2 | 1 | 3 |   |   |   | 3 | 4 |   |   | 2 | 3 | 4 |   |   | 4 | 1 | 2 |   |   | 1 |   |   |   | 2 |   | 4  | 30 2.7 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   | 3 | 4 |   |   |   |   | 4 |   |   |   |   | 4 | 4 |   |   | 4 |    | 10 3.9 |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |       |     |     |     |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|
|  | 078         | 075   | 062   | 072   | 078   | 077   | 077   | 066   | 077   | 077   | 044   | 077   | 066   | 011   | 055   | 077   | 066   | 044   | 055   | 066   |          | 066   | 077   | 077   | 077   | 077   | 066   | 066   |     |     |     |     |
|  | 088         | 055   | 022   | 022   | 022   | 000   | 011   | 000   | 022   | 088   | 000   | 055   | 044   | 055   | 000   | 000   | 022   | 088   | 033   | 099   |          | 022   | 033   | 088   | 022   | 022   | 022   | 088   | 066 |     |     |     |
| ANIMAL ID  | 06192       | 06222 | 06222 | 06222 | 06222 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800    | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 | 08800 |     |     |     |     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       | 1     | 4.0 |     |     |     |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       |     | 2   | 1   | 2.0 |
| Pars Distalis, Cyst                                    |             |       |       | X     |       |       |       |       |       |       | X     |       |       |       |       |       | X     |       |       |       |          | X     | X     |       |       |       |       |       |     | 11  |     |     |
| Pars Distalis, Cyst Multilocular                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | X     |       |       |     | 2   |     |     |
| Pars Distalis, Hyperplasia                             | 2           | 1     | 2     | 2     | 2     |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       |       |          |       |       | 2     | 4     |       | 1     |       | 19  | 2.3 |     |     |
| Pars Distalis, Hypertrophy                             |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 1   | 1   | 2.0 |     |
| Pars Intermedia, Cyst                                  | X           |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |          |       |       |       |       |       |       |       | 2   |     |     |     |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | +     | +     | 48  |     |     |     |
| Ultimobranchial Cyst                                   |             |       |       |       |       |       |       |       |       |       |       | X     |       | X     |       |       |       |       |       |       |          |       |       |       |       |       |       |       |     | 5   |     |     |
| C-cell, Hyperplasia                                    |             |       |       | 2     | 1     |       | 2     | 1     |       | 1     |       |       |       |       |       |       | 2     |       |       |       |          |       | 1     |       |       |       |       |       | 18  | 1.5 |     |     |
| Follicular Cell, Hyperplasia                           | 3           |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       | 2     | 2     |       |       |       |          |       |       |       |       |       |       |       | 6   | 2.5 |     |     |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |  |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 | 2  | 3.0 |  |
| Lumen, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |  |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |  |
| Exfoliated Germ Cell              |   |   | 2 |   |   | 1 | 4 | 1 | 2 |   | 1 |   |   |   | 1 |   |   | 2 | 3 |   |   |   |   |   |   | 1 |   | 3 | 17 | 2.2 |  |
| Hypospermia                       | 4 |   |   |   | 4 | 4 | 4 |   |   |   | 4 |   |   | 4 |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   | 16 | 3.6 |  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   | 2 |   |   |   |   | 1 |   | 1 |   |   |   |   |   | 1 | 1 | 1 |   |   |   |   |   |   |   | 12 | 1.2 |  |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 1.2 |  |
| Preputial Gland                   | + | + | + |   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   | + | + | 15 |     |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |        |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|--------|
|  | 0708        | 0705 | 0622 | 0728 | 0779 | 0777 | 0676 | 0777 | 0774 | 0477 | 0611 | 0515 | 0776 | 0644 | 0545 | 0666 | 0666 | 0727 | 0777 | 0777 |          | 0676   |
| ANIMAL ID  | 0619        | 0620 | 0601 | 0611 | 0612 | 0805 | 0805 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806 | 0806     |        |
| Cyst   |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1      |
| Hyperkeratosis   | 4           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      | 4        | 3 4.0  |
| Inflammation, Suppurative                              | 4           | 1    | 4    |      | 4    |      |      |      |      |      |      |      |      |      |      |      | 3    | 4    |      | 4    | 4        | 13 3.2 |
| Necrosis   |             |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 3.0  |
| Duct, Dilatation                                       | 4           | 2    | 4    |      | 4    |      |      |      |      |      |      |      |      |      |      |      | 4    | 3    |      | 3    | 4        | 14 3.4 |
| Prostate, Dorsal/lateral Lobe                          | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +        | 49     |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |          | 1 3.0  |
| Cyst, Mucinous   |             |      |      |      |      | X    |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |          | 7      |
| Fibrosis   |             |      |      |      |      | 3    |      | 2    | 2    |      |      | 2    |      | 2    |      |      | 3    | 3    |      |      |          | 12 2.2 |
| Hemorrhage   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |
| Infiltration Cellular, Lymphocyte                      | 1           | 2    |      | 2    | 1    | 2    |      | 2    | 2    |      | 1    | 2    |      | 2    | 2    |      | 2    | 2    | 1    |      | 1        | 35 1.5 |
| Inflammation, Suppurative                              | 2           | 2    | 1    | 1    | 2    | 2    | 1    | 2    | 3    |      | 1    | 2    |      | 2    | 2    |      | 3    | 3    | 2    | 3    | 3        | 44 2.0 |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2 1.0  |
| Prostate, Ventral Lobe                                 | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +        | 49     |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      | 3    |      |      |      |          | 4 2.5  |
| Fibrosis   |             |      |      | 1    |      | 1    |      |      |      |      |      | 2    |      |      |      |      | 3    |      | 2    | 2    |          | 12 1.9 |
| Hemorrhage   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3        | 1 4.0  |
| Infiltration Cellular, Lymphocyte                      |             | 2    |      | 1    |      | 1    |      |      | 1    | 1    |      | 1    |      | 2    |      |      | 1    | 2    |      | 2    |          | 20 1.4 |
| Inflammation, Suppurative                              |             |      |      | 1    |      |      |      |      |      |      |      | 1    |      | 2    |      |      |      |      | 2    |      |          | 10 1.7 |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2        | 3 2.3  |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |          | 2 1.0  |
| Epithelium, Hyperplasia                                |             |      | 2    |      | 2    | 2    |      |      |      |      | 2    |      |      | 2    |      |      |      |      | 2    | 2    |          | 14 1.9 |
| Seminal Vesicle  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | A    | +    | +    | +    | +        | 48     |
| Atrophy  |             |      | 3    |      |      |      |      |      |      |      |      |      | 3    |      |      |      | 3    |      |      |      |          | 5 3.0  |
| Fibrosis   |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |          | 1 4.0  |
| Inflammation, Chronic                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1 1.0  |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |          | 2 2.5  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0708        | 0705  | 0622  | 0628  | 0722  | 0729  | 0707  | 0601  | 0700  | 0702  | 0408  | 0703  | 0605  | 0104  | 0502  | 0708  | 0603  | 0407  | 0508  | 0603  | 0609  | 0702  | 0708  | 0707  |          |
| ANIMAL ID  | 06192       | 06221 | 06220 | 06211 | 06211 | 08051 | 08052 | 08061 | 08062 | 08071 | 08072 | 08081 | 08082 | 08091 | 08092 | 08101 | 08102 | 08111 | 08112 | 08121 | 08122 | 09011 | 09012 | 09021 | 09022    |

|                         |  |  |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |     |
|-------------------------|--|--|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|-----|
| Polyarteritis           |  |  |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1.0 |     |
| Epithelium, Hyperplasia |  |  | 3 |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4   | 2.5 |
| Lumen, Dilatation       |  |  |   |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1   | 2.0 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Testes                            | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |  |
| Polyarteritis                     | 3 | 2 | 4 |   | 2 | 4 | 4 | 2 | 2 | 1 | 3 | 3 |   | 2 | 4 |   |   |   |   |   | 4 |   | 1 |   | 3 | 28 | 2.7 |  |
| Seminiferous Tubule, Degeneration | 4 | 2 | 3 | 2 | 4 | 4 | 4 |   | 3 | 1 | 2 | 4 |   |   | 4 | 1 | 1 | 2 | 4 |   | 4 | 2 | 2 | 1 | 3 | 40 | 2.7 |  |
| Seminiferous Tubule, Dilatation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |  |

**HEMATOPOIETIC SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |  |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|--|
| Bone Marrow               | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |  |
| Hypocellularity           |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 2  | 3.0 |  |
| Myeloid Cell, Hyperplasia |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 |   |   |   |   |   |   |   | 4 |   |   |   |   | 5  | 3.6 |  |

|   |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |    |     |     |  |
|---|---|---|---|--|---|---|--|---|---|---|---|---|--|--|---|---|--|---|---|---|---|---|---|---|----|-----|-----|--|
| Lymph Node                                      | + | + | + |  | + | + |  | + | + |   | + |   |  |  | + | + |  | + | + | + |   |   |   | + | +  | 27  |     |  |
| Brachial, Degeneration, Cystic                  |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |    | 1   | 4.0 |  |
| Brachial, Hyperplasia, Lymphoid                 |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |    | 1   | 4.0 |  |
| Brachial, Infiltration Cellular, Plasma Cell    |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   |    | 1   | 3.0 |  |
| Inguinal, Hyperplasia, Lymphoid                 |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   | 4 |   |   |    | 1   | 4.0 |  |
| Inguinal, Infiltration Cellular, Plasma Cell    |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   | 4 |   |   |    | 1   | 4.0 |  |
| Lumbar, Degeneration, Cystic                    | 4 |   |   |  |   |   |  |   |   | 4 | 4 |   |  |  |   |   |  |   |   | 3 |   | 3 |   | 4 | 9  | 3.8 |     |  |
| Lumbar, Hyperplasia, Lymphoid                   |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   | 3 |   | 5  | 3.6 |     |  |
| Lumbar, Infiltration Cellular, Plasma Cell      |   |   |   |  |   |   |  |   |   |   | 3 | 4 |  |  |   |   |  |   | 4 |   | 4 | 4 | 4 |   | 9  | 3.6 |     |  |
| Mediastinal, Degeneration, Cystic               |   |   |   |  |   |   |  | 3 |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   | 1  | 3.0 |     |  |
| Mediastinal, Hyperplasia, Lymphoid              |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   | 1  | 3.0 |     |  |
| Mediastinal, Infiltration Cellular, Plasma Cell |   |   |   |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   | 1  | 4.0 |     |  |
| Pancreatic, Degeneration, Cystic                |   |   | 2 |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   | 1  | 2.0 |     |  |
| Pancreatic, Hyperplasia, Lymphoid               |   |   | 2 |  |   |   |  |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |   |   | 1  | 2.0 |     |  |
| Renal, Degeneration, Cystic                     | 4 | 3 | 4 |  | 4 | 4 |  | 4 |   | 4 | 4 |   |  |  |   |   |  |   |   | 3 |   |   |   | 4 | 16 | 3.8 |     |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |        |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|--------|
|  | 0708        | 0705  | 0625  | 0728  | 0779  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  | 0776  |          | 0776  |        |
| ANIMAL ID  | 06192       | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222 | 06222    | 06222 |        |
| Renal, Hemorrhage                                      |             | 4     |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |          | 5 2.8 |        |
| Renal, Hyperplasia, Lymphoid                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |       | 1 3.0  |
| Renal, Infiltration Cellular, Plasma Cell              | 2           |       | 4     |       |       |       |       | 4     |       |       |       | 4     | 3     |       |       |       |       |       |       |       |          |       | 5 3.4  |
| Renal, Pigmentation                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |          |       | 2 3.0  |
| Lymph Node, Mandibular<br>Degeneration, Cystic         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 13     |
| Hyperplasia, Lymphoid                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 5 3.4  |
| Infiltration Cellular, Plasma Cell                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 9 3.4  |
| Lymph Node, Mesenteric                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 10 3.5 |
| Spleen   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2      |
| Hematopoietic Cell Proliferation                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 49     |
| Hyperplasia, Lymphoid                                  | 2           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 24 2.1 |
| Pigmentation   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 6 2.0  |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 24 1.9 |
| Thymus   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2 1.0  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 48     |
| Fibrosis   | 4           | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4        | 4     | 46 4.0 |
| Epithelial Cell, Hyperplasia                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1 4.0  |

INTEGUMENTARY SYSTEM

|                        |   |   |  |   |   |   |  |   |  |   |   |  |  |   |   |   |  |  |   |   |   |   |    |        |
|------------------------|---|---|--|---|---|---|--|---|--|---|---|--|--|---|---|---|--|--|---|---|---|---|----|--------|
| Mammary Gland          |   |   |  |   |   |   |  |   |  |   |   |  |  |   |   |   |  |  |   |   |   |   | 49 |        |
| Galactocele            |   |   |  |   |   |   |  |   |  |   |   |  |  |   |   |   |  |  |   |   |   |   | 1  |        |
| Alveolus, Degeneration | 3 | 4 |  | 4 | 4 | 3 |  | 4 |  | 3 | 4 |  |  | 4 | 4 | 4 |  |  | 3 | 4 | 4 | 3 | 2  | 33 3.5 |
| Alveolus, Dilatation   |   |   |  |   |   |   |  |   |  |   |   |  |  |   |   |   |  |  |   |   |   |   |    | 6 2.2  |
| Duct, Dilatation       |   |   |  |   |   |   |  |   |  |   |   |  |  |   |   |   |  |  |   |   |   |   |    | 11 2.4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
|  | 0708        | 0725  | 0725  | 0728  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  |          | 0729 |
| ANIMAL ID  | 06192       | 06220 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221 | 06221    |      |

|   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |     |
|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|-----|
| Skin  |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 17 |   |     |
| Cyst Epithelial Inclusion                           | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 5 |     |
| Edema   |   | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 1 | 4.0 |
| Inflammation, Granulomatous Epithelium, Hyperplasia |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 3 | 3.7 |
| Epithelium, Foot, Hyperplasia                       |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 4.0 |
| Foot, Edema   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 3.7 |
| Foot, Fibrosis                                      |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 4.0 |
| Foot, Inflammation, Chronic Active                  |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 4.0 |
| Foot, Necrosis                                      |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 4.0 |
| Foot, Ulcer   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 | 4.0 |

MUSCULOSKELETAL SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Bone                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |    |     |     |
| Rib, Hyperostosis      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1   | 4.0 |
| Bone, Femur            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 3.4 |     |
| Osteopetrosis          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 3.0 |     |
| Skeletal Muscle        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |    |     |     |

NERVOUS SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Compression       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  | 3.0 |
| Gliosis           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hemorrhage        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
|  | 0708        | 0705 | 0622 | 0625 | 0728 | 0729 | 0700 | 0601 | 0700 | 0702 | 0408 | 0700 | 0605 | 0104 | 0505 | 0700 | 0600 | 0402 | 0508 | 0603 | 0609 | 0702 | 0702 | 0702 |          | 0606 |
| ANIMAL ID  | 0619        | 0621 | 0600 | 0601 | 0601 | 0805 | 0805 | 0806 | 0806 | 0806 | 0807 | 0807 | 0808 | 0808 | 0809 | 0809 | 0809 | 0809 | 0809 | 0900 | 0901 | 0901 | 0902 | 0902 | 0903     | 0903 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    |
|  | 6           | 6    | 6    | 6    | 6    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 9    | 9    | 9    | 9    | 9        | 9    |
|  | 1           | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 8    | 8    | 9    | 9    | 9    | 9        | 9    |
|  | 9           | 0    | 0    | 1    | 1    | 5    | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 9    | 9    | 9    | 9    | 9    | 9    | 0    | 1    | 1    | 2    | 2    | 3        | 3    |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2        | 1    |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |     |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|-----|-----|
| Vacuolization Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2.0 |    |     |     |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 |     |     |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 |     |     |
| Gliosis                   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |     | 2  | 2.0 |     |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |     | 1  | 1.0 |     |
| Necrosis                  |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |     | 2  | 2.0 |     |
| Pigmentation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |     | 1  | 2.0 |     |
| Thrombosis                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |     | 1  |     |     |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |     | 3  | 2.0 |     |
| Nerve Trigeminal          | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Axon, Degeneration        | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |     | 7  | 1.1 |     |
| Peripheral Nerve, Sciatic | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Peripheral Nerve, Tibial  | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Spinal Cord, Cervical     | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    | 2   | 1.5 |
| Spinal Cord, Lumbar       | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Axon, Degeneration        | 3 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |     | 6  | 2.3 |     |
| Spinal Cord, Thoracic     | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |     | 8  |     |     |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    | 2   | 1.5 |

**RESPIRATORY SYSTEM**

|      |   |   |   |  |  |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|------|---|---|---|--|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Lung | + | + | + |  |  | + | + | + |  | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |  |
|------|---|---|---|--|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 2500.StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|  | 0708        | 0725  | 0765  | 0772  | 0777  | 0777  | 0766  | 0777  | 0777  | 0744  | 0776  | 0711  | 0755  | 0777  | 0766  | 0744  | 0755  | 0766  | 0766  | 0777  |          | 0777  | 0766  |
| ANIMAL ID  | 06192       | 06222 | 06622 | 06622 | 06622 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800 | 06800    | 06800 | 06800 |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     |
|  | 7           | 7     | 6     | 7     | 7     | 7     | 6     | 7     | 7     | 4     | 7     | 6     | 1     | 5     | 7     | 6     | 4     | 5     | 6     | 6     | 7        | 7     | 7     |
|  | 0           | 2     | 2     | 2     | 2     | 0     | 1     | 0     | 2     | 8     | 0     | 5     | 4     | 5     | 0     | 0     | 2     | 8     | 3     | 9     | 2        | 2     | 2     |
|  | 8           | 5     | 5     | 8     | 9     | 7     | 6     | 7     | 4     | 3     | 9     | 3     | 6     | 2     | 8     | 3     | 7     | 9     | 2     | 3     | 8        | 8     | 5     |

|                                   |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   |   |   |     |     |     |
|-----------------------------------|--|---|--|--|--|---|--|---|--|--|---|--|--|---|--|--|--|--|--|---|---|---|---|---|-----|-----|-----|
| Congestion                        |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   |   | 1 | 4.0 |     |     |
| Fibrosis                          |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   |   |   | 1   | 2.0 |     |
| Hemorrhage                        |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   | 2 |   | 1   | 2.0 |     |
| Infiltration Cellular, Histiocyte |  | 2 |  |  |  | 2 |  | 4 |  |  | 2 |  |  | 2 |  |  |  |  |  | 1 |   | 2 | 4 |   | 14  | 1.9 |     |
| Inflammation, Granulomatous       |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   |   |   |     | 1   | 2.0 |
| Inflammation, Chronic Active      |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   |   |   |   |   |     | 1   | 1.0 |
| Alveolar Epithelium, Hyperplasia  |  |   |  |  |  |   |  |   |  |  |   |  |  |   |  |  |  |  |  |   | 2 |   |   |   |     | 1   | 2.0 |

|   |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |    |     |     |
|---|---|---|---|--|--|---|---|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|----|-----|-----|
| Nose  | + | + | + |  |  | + | + | + |  |  | + | + | + | A | + | + | + | + | + | + |   |   |  |   | + | 34 |     |     |
| Exudate   |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   | 1  | 4.0 |     |
| Fibrous Osteodystrophy                                |   |   |   |  |  |   | 3 |   |  |  |   |   | 4 |   |   |   |   |   |   |   |   |   |  | 2 |   | 5  | 2.8 |     |
| Foreign Body  |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   |   | X |   |   |   |  |   |   | 2  |     |     |
| Inflammation, Suppurative                             | 2 |   |   |  |  |   |   |   |  |  | 2 |   |   | 2 | 2 |   |   |   | 1 |   |   |   |  | 3 |   | 7  | 2.0 |     |
| Inflammation, Chronic Active                          |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   | 3 |   |   | 3 | 4 |  |   |   | 4  | 3.5 |     |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   | 3 |   |  |  |   | 2 | 2 |  |  | 2 | 2 |   |   | 4 | 4 |   |   |   |   |   | 2 |  |   |   | 15 | 2.6 |     |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |  |  |   |   |   |  |  |   |   |   |   | 2 |   |   |   |   |   |   |   |  |   |   |    | 6   | 2.0 |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   | 3 |  |   | 3 |    | 5   | 2.4 |
| Respiratory Epithelium, Ulcer                         |   |   |   |  |  |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  | 3 |   | 1  | 3.0 |     |
| Trachea   | + | + | + |  |  | + | + | + |  |  | + | + | + | A | + | + | + | + | + | + | + | + |  | + |   | 33 |     |     |

SPECIAL SENSES SYSTEM

|                                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |     |
|--------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|-----|
| Eye                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + | 1 |     |
| Cornea, Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 3 | 1 | 3.0 |
| Cornea, Mineralization               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |   | 1 | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                              |                  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |   |
|------------------------------|------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|
|                              |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |   |   |   |
| <b>SPRAGUE DAWLEY (NCTR)</b> | <b>RATS MALE</b> | 7           | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 4 | 7 | 6 | 1 | 5 | 7 | 6 | 4 | 5 | 6 | 6 | 7        | 7 | 7 | 7 | 6 |
|                              |                  | 8           | 5 | 5 | 8 | 9 | 7 | 6 | 7 | 4 | 3 | 9 | 3 | 6 | 2 | 8 | 3 | 7 | 9 | 3 | 3 | 8        | 8 | 2 | 2 | 5 |
| <b>F1 2500.StDose M</b>      | <b>ANIMAL ID</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0 |
|                              |                  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9        | 9 | 9 | 9 | 9 |
|                              |                  | 1           | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 9 | 9 | 9 | 9        | 9 | 9 | 9 | 9 |
|                              |                  | 9           | 0 | 0 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 0 | 1 | 1 | 2 | 2        | 3 | 3 | 3 | 3 |
|                              |                  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 1 | 2 | 1 | 2 |

URINARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Kidney                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Accumulation, Hyaline Droplet             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 1 4.0  |
| Casts Protein                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Infiltration Cellular, Polymorphonuclear  |   |   |   |   | 3 |   |   |   |   |   | 3 |   |   | 2 | 2 | 2 |   |   | 1 | 2 |   |   |   |   |   | 8 2.0  |
| Mineralization                            |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 3 |   | 6 3.8  |
| Nephropathy                               | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 3 |   | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 46 3.7 |
| Pigmentation                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 1 4.0  |
| Polyarteritis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0  |
| Polycystic Kidney                         |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4.0  |
| Cortex, Cyst                              |   |   |   |   |   |   |   |   | X |   | X |   |   | X |   |   | X |   | X | X | X |   |   |   |   | 14     |
| Pelvis, Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Renal Tubule, Cyst                        | X |   |   | X |   | X | X | X | X | X | X | X |   | X |   | X |   | X | X |   |   |   | X | X |   | 27     |
| Transitional Epithelium, Hyperplasia      |   |   | 1 |   |   | 1 | 1 | 1 | 2 | 3 | 2 | 1 |   | 2 |   |   |   |   | 2 | 2 |   | 1 |   |   |   | 20 1.7 |
| Urinary Bladder                           |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Lumen, Dilatation                         |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 4.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|---|
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 |   |   |   |
|  |  | 5           | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 4 |                    | 5 | 1 | 7 | 5 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |  | 3           | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 8                  | 5 | 2 | 2 | 8 |
|  |  | 5           | 6 | 2 | 4 | 2 | 6 | 8 | 7 | 1 | 0 | 6 | 8 | 3 | 7 | 9 | 6 | 5 | 1 | 7 | 9 | 8                  | 9 | 2 | 8 | 0 |
| <b>F1 25000StDose M</b>                    |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 | 0 |
|  |  | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6                  | 6 | 6 | 6 | 6 |
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3                  | 3 | 3 | 3 |   |
|  |  | 1           | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3                  | 4 | 4 | 5 |   |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                  | 2 | 1 | 2 |   |

ALIMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                    | + | + | + | + | + |   | + | + | + | + | + | + | + |   | + | + |   | + | + | + | + | + | + | + |   |
| Intestine Large, Colon       | + | + | A | + | + |   | + | + | + | + | A | + | A |   | + | + |   | + | + | + | + | + | + | + |   |
| Intestine Small, Duodenum    |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum       | + | + | A | + | + |   | + | + | + | + | A | + | A |   | + | + |   | A | + | + | + | + | + | + |   |
| Intestine Small, Jejunum     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bacterium                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foreign Body                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Perforation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus             |   |   |   | X |   | X |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Cholangiofibrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Clear Cell Focus             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X |   | X |   |   |   | X |   |
| Cyst                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Deformity                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic         |   |   |   | 2 |   |   |   |   | 3 |   | 1 | 2 |   |   | 2 | 2 |   | 2 | 3 | 2 |   |   |   |   | 1 |
| Fatty Change                 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |        |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|--------|------|
|  | 0535        | 0666 | 0664 | 0577 | 0672 | 0761 | 0670 | 0758 | 0667 | 0756 | 0674 | 0743 | 0777 | 0676 | 0772 | 0672 | 0770 | 0777 | 0488 | 0555 |           |                    | 0122   | 0778 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 020011 |      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                  | 020011 |      |

Hemorrhage

Hepatodiaphragmatic Nodule

Infiltration Cellular, Mononuclear Cell

Infiltration Cellular, Polymorphonuclear

Inflammation, Chronic Active

Polyarteritis

Vacuolization Cytoplasmic

Bile Duct, Hyperplasia

Biliary Tract, Cyst Multilocular

Biliary Tract, Fibrosis

Hepatocyte, Necrosis

Oval Cell, Hyperplasia

Mesentery

Fat, Abscess

Fat, Foreign Body

Fat, Inflammation, Granulomatous

Fat, Necrosis

Pancreas

Basophilic Focus

Infiltration Cellular, Lymphocyte

Inflammation, Chronic Active

Lipomatosis

Pigmentation

Polyarteritis

Acinar Cell, Hyperplasia

Acinus, Degeneration

Artery, Mineralization

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0535        | 0663 | 0664 | 0577 | 0662 | 0772 | 0661 | 0770 | 0558 | 0665 | 0776 | 0544 | 0777 | 0666 | 0772 | 0577 | 0667 | 0777 | 0448 | 0559 | 0172 | 0778 | 0552 | 0778 | 0558 |           |                    |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 020011    |                    |

|  |   |   |   |   |   |  |   |   |   |   |   |   |   |  |   |  |   |  |   |   |   |   |  |   |  |  |
|--|---|---|---|---|---|--|---|---|---|---|---|---|---|--|---|--|---|--|---|---|---|---|--|---|--|--|
| Stomach, Forestomach Inflammation, Chronic Active Necrosis | + | + | + | + | + |  | + | + | + | + | + | + |   |  | + |  | + |  | + | + | + | + |  | + |  |  |
| Ulcer Epithelium, Hyperplasia                              | 4 |   |   |   |   |  |   |   |   |   |   | 2 |   |  |   |  |   |  |   |   |   |   |  |   |  |  |
| Stomach, Glandular Mineralization Epithelium, Hyperplasia  | + | + | + | + | + |  | + | + | + | + | + | + | A |  | + |  | + |  | + | + | + | + |  | + |  |  |

CARDIOVASCULAR SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Blood Vessel Mineralization              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Heart Cardiomyopathy                     | 1 | 3 | 1 | 2 | 4 | 2 | 2 | 3 |   | 3 | 4 | 1 | 3 | 2 | 2 | 1 | 3 | 1 | 2 | 4 | 1 | 2 |   | 4 | 2 |  |
| Heart Metaplasia, Osseous Mineralization |   |   |   |   |   |   |   | 3 |   |   | 1 |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |  |
| Heart Polyarteritis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Heart Thrombosis                         |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

ENDOCRINE SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex Accessory Adrenal Cortical Nodule | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |  |
| Adrenal Cortex Angiectasis                       |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adrenal Cortex Degeneration, Cystic              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   | males<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|--------------------|
|  | 0535        | 0666  | 0664  | 0577  | 0672  | 0762  | 0671  | 0767  | 0556  | 0670  | 0788  | 0510  | 0685  | 0722  | 0492  | 0722  | 0675  | 0777  | 0777  | 0488  | 0559  | 0122  | 0728  | 0580  |   |                    |
| ANIMAL ID  | 02011       | 02021 | 02031 | 02041 | 02051 | 02061 | 02071 | 02081 | 02091 | 02101 | 02111 | 02121 | 02131 | 02141 | 02151 | 02161 | 02171 | 02181 | 02191 | 02201 | 02211 | 02221 | 02231 | 02241 |   |                    |
| Hyperplasia  |             |       |       | 1     |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |   |                    |
| Hypertrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |   |                    |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |   |                    |
| Vacuolization Cytoplasmic                              | 3           | 3     | 2     | 1     | 2     |       | 1     |       | 2     | 2     | 2     |       |       |       | 2     |       |       |       | 2     | 1     |       |       |       | 2     |   |                    |
| Adrenal Medulla  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     |   |                    |
| Hyperplasia  |             | 2     |       |       |       |       |       | 2     |       |       |       |       |       |       |       | 2     | 4     | 2     |       |       | 1     |       |       | 2     |   |                    |
| Islets, Pancreatic                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |   |                    |
| Parathyroid Gland                                      | +           | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     |       |   |                    |
| Hyperplasia  | 2           |       | 1     | 1     |       | 1     |       | 2     | 2     |       | 3     | 1     |       | 1     | 3     |       | 4     |       |       | 4     |       | 3     |       | 4     | 2 |                    |
| Pituitary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |   |                    |
| Angiectasis  |             |       |       |       |       |       | 4     |       |       |       |       | 4     |       |       |       | 4     |       |       |       |       |       |       |       |       |   |                    |
| Pars Distalis, Cyst                                    |             |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | X     |       | X     |   |                    |
| Pars Distalis, Cyst Multilocular                       |             |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |   |                    |
| Pars Distalis, Hyperplasia                             | 2           |       |       |       |       |       |       |       |       | 3     |       | 2     |       |       | 4     |       | 1     |       | 1     |       | 2     |       | 4     | 2     |   |                    |
| Pars Distalis, Hypertrophy                             |             |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       | 2     |   |                    |
| Pars Intermedia, Cyst                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |   |                    |
| Thyroid Gland  | +           | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |   |                    |
| Ultimobranchial Cyst                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |                    |
| C-cell, Hyperplasia                                    | 3           | 4     |       | 2     |       | 2     |       |       | 1     |       |       | 1     |       |       |       |       | 1     |       |       |       |       |       |       | 2     |   |                    |
| Follicle, Cyst   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |   |                    |
| Follicular Cell, Hyperplasia                           |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       | 2     |   |                    |

GENERAL BODY SYSTEM

Tissue NOS

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                              |                  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
| <b>SPRAGUE DAWLEY (NCTR)</b> | <b>RATS MALE</b> | 5           | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 4 | 5 | 1 | 7 | 5 |   |
|                              |                  | 3           | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 8 | 5 | 2 | 2 | 8 |
| <b>F1 25000StDose M</b>      | <b>ANIMAL ID</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              |                  | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 |   |
|                              |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |   |
|                              |                  | 1           | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 4 | 4 |   |
|                              |                  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 3 | 2 | 4 | 2 | 1 |   |

males (cont...)

GENITAL SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |   |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Exfoliated Germ Cell              |   |   |   |   | 2 |   | 1 |   |   |   | 2 |   |   | 1 |   | 1 | 2 |   |   | 3 |   | 1 |   |   |   |
| Hypospermia                       | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   | 1 |   | 1 |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |
| Inflammation, Chronic             |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Spermatocele                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Preputial Gland                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   |   | + | + |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Duct, Dilatation                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |   |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                         | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |
|--|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|
|  |                         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |   |   |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS MALE</b> |                         | 5           | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 4 | 5 | 1 | 7                  | 5 |   |
|  |                         | 3           | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 8 | 5 | 2                  | 2 | 8 |
|  |                         | 5           | 6 | 2 | 4 | 2 | 6 | 8 | 7 | 1 | 0 | 6 | 8 | 3 | 7 | 9 | 6 | 5 | 1 | 7 | 9 | 8 | 9 | 2                  | 8 | 0 |
|  | <b>F1 25000StDose M</b> |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 |
|  | <b>ANIMAL ID</b>        | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6                  | 6 |   |
|  |                         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3                  | 3 |   |
|  |                         | 1           | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4                  | 5 |   |
|  |                         | 1           | 2 | 1 | 2 | 1 | 3 | 2 | 1 | 4 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2                  | 1 |   |

Epithelium, Hyperplasia

Prostate, Ventral Lobe

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Atrophy                           | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                             | 3 | 3 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |
| Fibrosis                          |   |   |   |   |   |   |   |   | 4 |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 3 |   |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   | 1 |   |   |   |   |   | 2 | 1 | 1 | 1 | 1 |   |   |   |   |   | 1 | 1 |   |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   | 3 | 1 |   | 1 | 1 |   |   |   |   |   |   | 1 |   |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 |   |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |
| Epithelium, Hyperplasia           |   |   |   |   |   | 2 | 2 |   | 2 |   | 2 |   |   |   | 2 |   | 1 |   |   |   | 4 |   | 2 | 2 |

Seminal Vesicle

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Atrophy                      | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Edema                        | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia      |   |   |   |   | 4 |   |   | 3 |   |   |   |   | 3 |   |   |   | 2 |   |   |   |   |   | 3 |   |
| Lumen, Dilatation            |   | 2 |   |   |   |   |   |   |   |   | 4 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |

Testes

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Abscess                           | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis                     |   |   |   |   | 3 |   |   |   |   | 1 | 3 |   |   |   | 2 |   | 4 | 1 |   | 4 |   | 1 |   | 2 |
| Seminiferous Tubule, Degeneration | 4 |   | 2 |   | 4 |   | 1 |   |   | 3 | 3 |   |   | 1 | 1 | 1 | 1 | 4 | 2 | 3 | 1 | 1 |   |   |
| Seminiferous Tubule, Dilatation   | 3 |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |

HEMATOPOIETIC SYSTEM

Bone Marrow

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically      M .. Missing tissue  
 X .. Lesion present      A .. Autolysis precludes evaluation  
 I .. Insufficient tissue      BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0535        | 0666 | 0664 | 0577 | 0672 | 0668 | 0767 | 0767 | 0556 | 0675 | 0675 | 0477 | 0477 | 0666 | 0777 | 0777 | 0777 | 0477 | 0555 | 0117 | 0777 | 0555 | 0117 | 0777 | 0555 |           |                    |
| Hypocellularity  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Myeloid Cell, Hyperplasia                              |             |      |      | 3    |      |      | 3    |      |      |      | 4    |      |      | 3    |      |      |      | 3    |      |      |      |      |      |      |      | 4         |                    |
| Lymph Node   | +           | +    |      |      | +    | +    |      |      | +    | +    |      |      |      |      |      |      |      | +    |      |      | +    | +    |      |      | +    |           |                    |
| Brachial, Degeneration, Cystic                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Lumbar, Degeneration, Cystic                           |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |           |                    |
| Lumbar, Hyperplasia, Lymphoid                          |             |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Lumbar, Infiltration Cellular, Plasma Cell             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mediastinal, Degeneration, Cystic                      |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mediastinal, Hemorrhage                                |             |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mediastinal, Hyperplasia, Lymphoid                     |             |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mediastinal, Infiltration Cellular, Plasma Cell        |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mediastinal, Inflammation, Suppurative                 |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pancreatic, Infiltration Cellular, Histiocyte          |             |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pancreatic, Infiltration Cellular, Plasma Cell         |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Pancreatic, Pigmentation                               |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Renal, Degeneration, Cystic                            |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      | 4    |      |      | 4    |      |      |      | 4    |           |                    |
| Renal, Hemorrhage                                      |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Renal, Hyperplasia, Lymphoid                           |             |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Renal, Infiltration Cellular, Plasma Cell              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Lymph Node, Mandibular                                 |             |      | +    | +    |      |      |      |      |      |      | +    | +    |      |      |      |      |      |      |      |      | +    |      |      |      | +    |           |                    |
| Degeneration, Cystic                                   |             |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 4    |      |      |      | 3    |           |                    |
| Hyperplasia, Lymphoid                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      | 3    |           |                    |
| Infiltration Cellular, Plasma Cell                     |             |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      | 3    |           |                    |
| Lymph Node, Mesenteric                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Spleen   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Hematopoietic Cell Proliferation                       |             |      | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
|  |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      | 4    |      |      |      | 2    |           |                    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|
|  | 0535        | 0666  | 0664  | 0577  | 0672  | 0661  | 0770  | 0678  | 0771  | 0556  | 0667  | 0775  | 0449  | 0772  | 0772  | 0662  | 0775  | 0777  | 0777  | 0448  | 0559  | 0112  | 0778  | 0558  |                    | 0778  |
| ANIMAL ID  | 02011       | 02241 | 02221 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201 | 02201              | 02201 |

Hyperplasia, Lymphoid Necrosis 2 2  
 Pigmentation 2 2 1 2 4 2 4 2 4 4 2 3  
 Polyarteritis

Thymus + + + + + + + + + + + M + + + + + + + + + + + + + +  
 Atrophy 4  
 Hemorrhage

INTEGUMENTARY SYSTEM

Mammary Gland +  
 Alveolus, Degeneration 4 4 3 4 4 3 4 4 3 1 4 4 3 2 2  
 Alveolus, Dilatation 2 2 2 2 2 3 3 4 4 4 4 4 4 4 4  
 Duct, Dilatation 2 3 3 3 3 3 4 4 4 4 4 4 4 4 4 2  
 Skin +  
 Abscess 4  
 Angiectasis X  
 Cyst Epithelial Inclusion X  
 Hemorrhage 4  
 Inflammation, Suppurative 4  
 Inflammation, Granulomatous 4  
 Ulcer 4  
 Epithelium, Foot, Hyperplasia 4  
 Foot, Edema 4  
 Foot, Fibrosis 4  
 Foot, Inflammation, Chronic Active 4  
 Foot, Necrosis 4  
 Foot, Ulcer 4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04  
Test Type: CHRONIC  
Route: GAVAGE  
Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
Time Report Requested: 10:21:03  
First Dose M/F: 09/25/12 / 09/25/12  
Lab: NCTR

|                                    |                  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |   |   |   |
|------------------------------------|------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|---|---|
|                                    |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    | 0 | 0 |   |
|                                    |                  | 5           | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 4 |                    | 5 | 1 | 7 |
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE |                  | 3           | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 0 | 2 | 1 | 8 | 5                  | 2 | 2 | 8 |
|                                    | F1 25000StDose M | 5           | 6 | 2 | 4 | 2 | 6 | 8 | 7 | 1 | 0 | 6 | 8 | 3 | 7 | 9 | 6 | 5 | 1 | 7 | 9 | 8                  | 9 | 2 | 8 |
|                                    |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                  | 0 | 0 | 0 |
|                                    | ANIMAL ID        | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6                  | 6 | 6 | 6 |
|                                    |                  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3                  | 3 | 3 | 3 |
|                                    |                  | 1           | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 4                  | 4 | 5 |   |
|                                    |                  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2                  | 1 | 2 | 1 |

MUSCULOSKELETAL SYSTEM

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tarsal, Hyperostosis         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bone, Femur                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrous Osteodystrophy       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skeletal Muscle              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fibrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

NERVOUS SYSTEM

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Brain, Brain Stem         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compression               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebellum         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebrum           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ventricle, Dilatation     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nerve Trigeminal          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Axon, Degeneration        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peripheral Nerve, Sciatic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0535        | 0666 | 0664 | 0577 | 0672 | 0672 | 0671 | 0670 | 0585 | 0652 | 0683 | 0706 | 0709 | 0676 | 0772 | 0772 | 0771 | 0779 | 0488 | 0559 | 0122 | 0728 | 0589 | 0178 | 0580 |           |                    |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |           |                    |
|  | 2           | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 6    | 6    | 6    | 6    | 6    | 6    |           |                    |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 3    | 3    | 3    | 3    |           |                    |
|  | 1           | 1    | 2    | 2    | 3    | 3    | 4    | 4    | 5    | 5    | 7    | 8    | 8    | 9    | 9    | 0    | 0    | 1    | 1    | 1    | 1    | 3    | 3    | 4    | 4    |           |                    |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    |           |                    |

Peripheral Nerve, Tibial +  
 Spinal Cord, Cervical +  
 Spinal Cord, Lumbar Axon, Degeneration 1  
 Spinal Cord, Thoracic Hemorrhage +

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   |   |
|---|---|---|---|---|---|--|---|---|---|---|---|---|--|---|--|---|---|---|---|---|---|---|--|---|---|
| Lung  | + | + | + | + | + |  | + | + | + | + | + | + |  | + |  | + | + | + | + | + | + | + |  | + |   |
| Foreign Body  |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | X |
| Infiltration Cellular, Histiocyte                     |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 4 |
| Inflammation, Granulomatous                           |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 1 |
| Inflammation, Chronic                                 |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 4 |
| Metaplasia, Osseous                                   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 1 |
| Nose  | + | + | + | + | + |  | + | + | + | + | + | + |  | + |  | + | + | + | + | + | + | + |  | + |   |
| Cyst Epithelial Inclusion                             |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | X |
| Fibrous Osteodystrophy                                |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 2 |
| Foreign Body  |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | X |
| Inflammation, Suppurative                             |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 3 |
| Inflammation, Chronic Active                          |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 3 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 2 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |  |   |   |   |   |   |   |  |   |  |   |   |   |   |   |   |   |  |   | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                        |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE |           | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 4 | 5 | 1 | 7 | 5 |   |
|                                    |           | 3 | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 0 | 0 | 1 | 8 | 5 | 2 | 2 | 8 |
| F1 25000StDose M                   |           | 5 | 6 | 2 | 4 | 2 | 6 | 8 | 7 | 1 | 0 | 6 | 8 | 3 | 7 | 9 | 6 | 5 | 1 | 7 | 9 | 8 | 9 | 2 |   |
|                                    | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                    |           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 |   |
|                                    |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |   |
|                                    |           | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 4 | 4 |   |
|                                    |           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |

males  
(cont...)

Respiratory Epithelium, Hyperplasia, Goblet Cell  
 Respiratory Epithelium, Ulcer  
 Transitional Epithelium, Accumulation, Hyaline Droplet  
 Upper Molar, Fibrosis

2  
 3  
 3

Trachea + + A + + + + + + + A + + + + + + +

SPECIAL SENSES SYSTEM

Eye  
 Retina, Degeneration

+  
 3

Zymbal's Gland  
 Cyst, Squamous

+  
 X

URINARY SYSTEM

Kidney  
 Accumulation, Hyaline Droplet  
 Casts Protein  
 Fibrosis  
 Hemorrhage  
 Infiltration Cellular, Polymorphonuclear  
 Mineralization  
 Necrosis  
 Nephropathy  
 Polyarteritis  
 Cortex, Cyst  
 Pelvis, Dilatation

+ + + + + + + + + + A + + + + + + + + + +  
 4  
 1  
 4  
 4  
 2 2  
 2  
 4 4  
 2 4 3 4 4 2 4  
 4 1 4  
 X X X X X X  
 2 1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M |  | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | males<br>(cont...) |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|---|
| ANIMAL ID  |  | 5           | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 5 | 4 | 7 | 7 | 6 | 7 | 7 | 7 | 4 | 5 | 1 | 7 | 5 |                    |   |
|  |  | 3           | 6 | 4 | 7 | 7 | 2 | 1 | 0 | 8 | 5 | 2 | 0 | 9 | 2 | 2 | 2 | 2 | 0 | 2 | 1 | 8 | 5 | 2 | 2 |                    | 8 |
|  |  | 5           | 6 | 2 | 4 | 2 | 6 | 8 | 7 | 1 | 0 | 6 | 8 | 3 | 7 | 9 | 6 | 5 | 1 | 7 | 9 | 8 | 9 | 2 | 8 |                    |   |
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |   |
|  |  | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6                  |   |
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3                  |   |
|  |  | 1           | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 5 |                    |   |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |                    |   |
| Renal Tubule, Cyst                                     |  |             |   | X |   | X |   | X | X |   | X | X |   | X |   | X | X |   |   |   |   | X | X | X |   |                    |   |
| Renal Tubule, Dilatation                               |  |             |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |
| Renal Tubule, Hyperplasia, Atypical                    |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |
| Transitional Epithelium, Hyperplasia                   |  |             |   |   |   |   |   |   | 2 |   | 1 |   |   |   |   | 1 | 1 |   |   |   | 3 |   |   |   |   |                    |   |
| Urinary Bladder  |  |             |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |                    |   |
| Hemorrhage   |  |             |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |                    |   |
| Inflammation, Chronic Active                           |  |             |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                    |   |
| Lumen, Dilatation                                      |  |             |   |   |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |                    |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                 |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST | 078   | 0475  | 0493  | 0545  | 0715  | 0675  | 0328  | 0259  | 0540  | 0644  | 0538  | 0601  | 0549  | 0466  | 0531  | 0727  | 0466  | 0225  | 0481  |                 |
|  | ANIMAL ID   | 06352 | 06361 | 06362 | 06367 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368 | 06368           |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | <b>* TOTALS</b> |

ALIMENTARY SYSTEM

|                              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Esophagus                    |  | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + |   | + | A | + | <b>36</b> |               |
| Intestine Large, Colon       |  | + | + | + | + | + |   | + | + | + | A | + | + | + | + | + |   |   | A | A | +         | <b>31</b>     |
| Intestine Small, Duodenum    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>      |
| Intestine Small, Ileum       |  | + | + | + | + | + |   | + | + | + | A | + | + | + | + | + |   |   | A | A | +         | <b>30</b>     |
| Intestine Small, Jejunum     |  |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |   |           | <b>2</b>      |
| Bacterium                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |           | <b>1</b>      |
| Fibrosis                     |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |           | <b>1 4.0</b>  |
| Foreign Body                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |           | <b>1</b>      |
| Inflammation, Suppurative    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |           | <b>1 4.0</b>  |
| Inflammation, Chronic Active |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |           | <b>1 3.0</b>  |
| Mineralization               |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |           | <b>1 3.0</b>  |
| Necrosis                     |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |           | <b>1 4.0</b>  |
| Perforation                  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |           | <b>1 4.0</b>  |
| Ulcer                        |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |           | <b>1 4.0</b>  |
| Liver                        |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +         | <b>46</b>     |
| Angiectasis                  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 1 |   |           | <b>3 1.7</b>  |
| Basophilic Focus             |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>5</b>      |
| Cholangiofibrosis            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 4.0</b>  |
| Clear Cell Focus             |  |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X |   |   |           | <b>7</b>      |
| Cyst                         |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>      |
| Deformity                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>      |
| Degeneration, Cystic         |  | 2 | 2 |   |   | 1 | 2 |   |   |   |   | 1 |   |   | 2 |   |   | 1 | 2 |   |           | <b>18 1.8</b> |
| Fatty Change                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 4.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |     |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|-----|
|  | 078         | 045   | 049   | 054   | 071   | 068   | 073   | 032   | 025   | 056   | 054   | 034   | 003   | 005   | 046   | 061   | 054   | 077   | 044   | 022   |          | 044 |     |
| ANIMAL ID  | 06352       | 06336 | 06333 | 06333 | 06311 | 06311 | 06322 | 06322 | 06300 | 06301 | 06322 | 06322 | 06322 | 06322 | 06322 | 06333 | 06333 | 06333 | 06344 | 06344 | 06355    |     |     |
| Hemorrhage   |             |       | 4     | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 4.0 |     |
| Hepatodiaphragmatic Nodule                             |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | 5        |     |     |
| Infiltration Cellular, Mononuclear Cell                | 2           | 2     |       |       | 2     |       | 1     |       |       | 1     |       | 2     | 1     |       | 1     | 1     |       |       | 1     | 1     | 29       | 1.5 |     |
| Infiltration Cellular, Polymorphonuclear               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       | 1        | 1.0 |     |
| Inflammation, Chronic Active                           |             |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 3.0 |     |
| Polyarteritis  |             | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 1.0 |     |
| Vacuolization Cytoplasmic                              |             | 2     |       |       |       |       | 1     |       |       |       |       | 1     |       |       |       |       |       |       |       |       | 1        | 1.3 |     |
| Bile Duct, Hyperplasia                                 | 4           |       | 2     |       | 2     |       |       |       |       |       | 2     |       |       |       |       |       |       | 2     |       |       | 13       | 2.4 |     |
| Biliary Tract, Cyst Multilocular                       |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |     |     |
| Biliary Tract, Fibrosis                                | 1           |       |       |       | 2     | 2     |       |       |       | 1     | 2     |       | 1     |       |       |       |       |       |       |       | 18       | 1.4 |     |
| Hepatocyte, Necrosis                                   |             |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       | 2        | 3.0 |     |
| Oval Cell, Hyperplasia                                 |             |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 1.7 |     |
| Mesentery  |             |       |       |       |       |       |       |       |       |       | +     |       |       |       |       |       | +     |       |       |       | 2        |     |     |
| Fat, Abscess   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       | 1        | 4.0 |     |
| Fat, Foreign Body                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       | 1        |     |     |
| Fat, Inflammation, Granulomatous                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       | 1        | 4.0 |     |
| Fat, Necrosis  |             |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       | 4     |       |       | 2        | 4.0 |     |
| Pancreas   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | +     | 44       |     |     |
| Basophilic Focus                                       |             |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | 1        |     |     |
| Infiltration Cellular, Lymphocyte                      | 1           | 2     | 1     |       | 3     | 1     | 2     | 1     |       | 1     | 1     | 1     | 1     | 2     | 1     | 1     | 2     | 2     | 2     |       | 2        | 32  | 1.7 |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 1.5 |     |
| Lipomatosis  |             | 2     |       |       |       |       | 3     |       |       |       |       |       |       | 3     |       |       |       | 3     |       |       | 13       | 2.9 |     |
| Pigmentation   |             | 2     |       |       | 2     | 1     |       | 1     |       |       | 1     |       |       |       |       | 1     | 2     |       | 2     |       | 2        | 21  | 1.4 |
| Polyarteritis  |             | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 2.5 |     |
| Acinar Cell, Hyperplasia                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       | 1        | 3.0 |     |
| Acinus, Degeneration                                   | 1           | 4     |       |       | 3     | 1     | 3     | 1     |       |       | 1     | 2     |       | 3     | 2     | 1     | 2     | 3     | 2     |       | 2        | 34  | 2.3 |
| Artery, Mineralization                                 |             |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 1        | 4.0 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |                 |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|  | 0728        | 0445 | 0493 | 0545 | 0715 | 0675 | 0738 | 0325 | 0254 | 0544 | 0643 | 0560 | 0494 | 0611 | 0531 | 0727 | 0466 | 0226 | 0495 | 0481 |           |                 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0635      |                 |
|  | 6           | 6    | 6    | 6    | 6    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 0    | 0    | 0    | 0    | 0    | 3352      |                 |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 5621      |                 |
|  | 8           | 5    | 3    | 5    | 5    | 8    | 8    | 9    | 4    | 0    | 0    | 8    | 1    | 4    | 6    | 5    | 1    | 7    | 6    | 5    | 2812      |                 |
|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | <b>* TOTALS</b> |

Stomach, Forestomach  
 Inflammation, Chronic Active Necrosis  
 Ulcer  
 Epithelium, Hyperplasia

37  
2 3.0  
1 4.0  
1 4.0  
2 3.5

Stomach, Glandular  
 Mineralization  
 Epithelium, Hyperplasia

36  
2 4.0  
1 4.0

CARDIOVASCULAR SYSTEM

Blood Vessel  
 Mineralization

46  
4 3.3

Heart  
 Cardiomyopathy  
 Metaplasia, Osseous  
 Mineralization  
 Polyarteritis  
 Thrombosis  
 Pericardium, Fibrosis  
 Pericardium, Necrosis

46  
41 2.3  
2 1.5  
4 3.3  
1 1.0  
1  
1 2.0  
1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex  
 Accessory Adrenal Cortical Nodule  
 Angiectasis  
 Degeneration, Cystic

44  
2  
2 2.0  
1 3.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0728        | 0475  | 0493  | 0545  | 0715  | 0675  | 0738  | 0325  | 0254  | 0540  | 0644  | 0530  | 0601  | 0549  | 0466  | 0651  | 0531  | 0727  | 0466  | 0225  |          |
| ANIMAL ID  | 06352       | 06336 | 06333 | 06337 | 06311 | 06311 | 06322 | 06322 | 06300 | 06301 | 06311 | 06312 | 06312 | 06322 | 06323 | 06333 | 06333 | 06344 | 06344 | 06355 | 06352    |
| Hyperplasia  |             |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       | 4        |
| Hypertrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       | 2        |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Vacuolization Cytoplasmic                              | 2           | 2     | 2     |       |       |       |       |       |       |       |       |       |       | 2     | 3     |       |       | 2     | 2     |       | 20       |
| Adrenal Medulla  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 44       |
| Hyperplasia  |             |       |       |       | 2     | 2     |       |       |       | 1     |       |       |       |       |       |       |       | 1     |       |       | 11       |
| Islets, Pancreatic                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | 44       |
| Parathyroid Gland                                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 43       |
| Hyperplasia  |             |       |       |       |       | 2     |       |       |       |       | 3     | 1     |       | 3     | 4     | 2     | 2     |       |       |       | 23       |
| Pituitary Gland  | +           | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | 43       |
| Angiectasis  |             |       |       |       |       | 3     |       |       |       |       |       |       |       |       |       |       |       | 4     | 4     |       | 6        |
| Pars Distalis, Cyst                                    |             |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | 5        |
| Pars Distalis, Cyst Multilocular                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |
| Pars Distalis, Hyperplasia                             | 4           |       |       | X     | 4     |       | X     |       |       |       |       |       | 2     | 2     | 1     | 2     |       | 3     |       |       | 19       |
| Pars Distalis, Hypertrophy                             |             |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       | 2     |       |       | 4        |
| Pars Intermedia, Cyst                                  |             |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | 2        |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | 42       |
| Ultimobranchial Cyst                                   |             |       |       |       |       | X     |       | X     | X     |       |       |       |       |       |       |       |       |       |       | X     | 4        |
| C-cell, Hyperplasia                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 13       |
| Follicle, Cyst   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |
| Follicular Cell, Hyperplasia                           | 3           | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 7        |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | 1 |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID |                 |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------------|---|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                 | 0 |
|  | 7           | 4 | 4 | 5 | 7 | 6 | 7 | 3 | 2 | 5 | 6 | 5 | 6 | 5 | 4 | 6 | 5 | 7 | 4 | 2 | 4         |                 |   |
|  | 2           | 7 | 9 | 4 | 1 | 8 | 2 | 5 | 5 | 4 | 4 | 3 | 0 | 9 | 4 | 1 | 3 | 2 | 6 | 9 | 8         |                 |   |
|  | 8           | 5 | 3 | 5 | 5 | 5 | 8 | 9 | 4 | 0 | 0 | 8 | 1 | 4 | 6 | 5 | 1 | 7 | 6 | 5 | 1         |                 |   |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1         |                 |   |
|  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                 |   |
|  | 3           | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                 |   |
|  | 5           | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5         |                 |   |
|  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2         |                 |   |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>* TOTALS</b> |   |

**GENITAL SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |            |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|------------|
| Coagulating Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | <b>44</b> |           |            |
| Atrophy                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>  | <b>3.5</b> |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |           | <b>1</b>  | <b>2.0</b> |
| Inflammation, Suppurative         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |           | <b>1</b>  | <b>3.0</b> |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |
| Epididymis                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b> |           |            |
| Exfoliated Germ Cell              |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |           | <b>9</b>  | <b>1.7</b> |
| Hypospermia                       | 4 | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |           | <b>8</b>  | <b>4.0</b> |
| Infiltration Cellular, Lymphocyte | 1 | 2 |   |   | 1 | 1 |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   | 1 |   |           | <b>13</b> | <b>1.1</b> |
| Inflammation, Chronic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>2.0</b> |
| Polyarteritis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>2</b>  | <b>1.0</b> |
| Spermatocele                      | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  |            |
| Preputial Gland                   | + |   |   | + |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   | + | <b>12</b> |           |            |
| Hyperkeratosis                    |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   |   |           | <b>2</b>  | <b>4.0</b> |
| Inflammation, Suppurative         | 3 |   |   | 2 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |           | <b>8</b>  | <b>3.6</b> |
| Duct, Dilatation                  | 3 |   |   | 3 |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |   |   |           | <b>10</b> | <b>3.5</b> |
| Prostate, Dorsal/lateral Lobe     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>45</b> |           |            |
| Cyst, Mucinous                    |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   | X |   |   |   |   |           | <b>4</b>  |            |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |
| Fibrosis                          |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 4 |   |   |   |   |   |   |           | <b>6</b>  | <b>2.7</b> |
| Infiltration Cellular, Lymphocyte | 2 |   |   |   | 1 |   | 1 |   |   |   | 1 |   |   | 1 | 2 | 4 | 2 | 1 | 1 |   | 2 |           | <b>22</b> | <b>1.5</b> |
| Inflammation, Suppurative         | 3 |   | 1 | 2 | 2 | 3 | 3 | 2 |   | 2 |   | 2 | 1 | 1 | 2 | 4 | 2 | 2 | 2 | 2 |   |           | <b>38</b> | <b>2.1</b> |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  | <b>4.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |                 |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|------|
|  | 0728        | 0475 | 0493 | 0545 | 0715 | 0678 | 0732 | 0325 | 0254 | 0540 | 0644 | 0538 | 0650 | 0594 | 0461 | 0631 | 0577 | 0446 | 0226 | 0495 |           |                 | 0748 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 063352          |      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 063352          |      |
|  | 3           | 3    | 3    | 3    | 3    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 0    | 0    | 0    | 0    | 0         | 063352          |      |
|  | 5           | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5    | 5         | 063352          |      |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2         | 063352          |      |
|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | <b>* TOTALS</b> |      |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 1 2.0           |      |
| Prostate, Ventral Lobe                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 45              |      |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 4 3.0           |      |
| Edema  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 8 3.3           |      |
| Infiltration Cellular, Lymphocyte                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2 2       | 18 1.7          |      |
| Inflammation, Suppurative                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 9 2.0           |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3         | 4 2.3           |      |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 2 2.5           |      |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 13 2.2          |      |
| Seminal Vesicle  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 42              |      |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 3 3.0           |      |
| Edema  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3         | 6 3.0           |      |
| Lumen, Dilatation                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 4 2.8           |      |
| Testes   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 45              |      |
| Abscess  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 1 4.0           |      |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 16 2.2          |      |
| Seminiferous Tubule, Degeneration                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4 4       | 27 2.3          |      |
| Seminiferous Tubule, Dilatation                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 2 3.5           |      |
| <b>HEMATOPOIETIC SYSTEM</b>                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                 |      |
| Bone Marrow  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | 45              |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------------|------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                 |            |
|  | 7           | 4 | 4 | 5 | 7 | 6 | 7 | 3 | 2 | 5 | 6 | 5 | 6 | 5 | 4 | 6 | 5 | 7 | 4 | 2 | 4         |                 |            |
|  | 2           | 7 | 9 | 4 | 1 | 8 | 2 | 5 | 5 | 4 | 4 | 3 | 0 | 9 | 4 | 1 | 3 | 2 | 6 | 9 | 8         |                 |            |
|  | 8           | 5 | 3 | 5 | 5 | 8 | 8 | 9 | 4 | 0 | 0 | 8 | 1 | 4 | 6 | 5 | 1 | 7 | 6 | 5 | 1         |                 |            |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |           |                 |            |
|  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |           |                 |            |
|  | 3           | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |           |                 |            |
|  | 5           | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 |           |                 |            |
|  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |           |                 |            |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>* TOTALS</b> |            |
| Hypocellularity  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  | <b>3.0</b>      |            |
| Myeloid Cell, Hyperplasia                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 | <b>5</b>  | <b>3.8</b>      |            |
| Lymph Node   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>16</b> |                 |            |
| Brachial, Degeneration, Cystic                         |             |   |   | + | + | + |   |   |   | + |   |   |   | + |   |   |   |   |   |   |           |                 |            |
| Lumbar, Degeneration, Cystic                           |             |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |           |                 |            |
| Lumbar, Hyperplasia, Lymphoid                          |             |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Lumbar, Infiltration Cellular, Plasma Cell             |             |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Mediastinal, Degeneration, Cystic                      |             |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |           |                 |            |
| Mediastinal, Hemorrhage                                |             |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |           |                 |            |
| Mediastinal, Hyperplasia, Lymphoid                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Mediastinal, Infiltration Cellular, Plasma Cell        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Mediastinal, Inflammation, Suppurative                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Pancreatic, Infiltration Cellular, Histiocyte          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Pancreatic, Infiltration Cellular, Plasma Cell         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Pancreatic, Pigmentation                               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Renal, Degeneration, Cystic                            |             |   |   |   | 4 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Renal, Hemorrhage                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Renal, Hyperplasia, Lymphoid                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Renal, Infiltration Cellular, Plasma Cell              |             |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Lymph Node, Mandibular                                 | +           |   | + | + | + |   |   |   | + |   | + |   | + |   | + |   | + |   | + |   |           |                 |            |
| Degeneration, Cystic                                   | 3           |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 3 |   | 3 |   |   |   |           |                 |            |
| Hyperplasia, Lymphoid                                  |             |   |   |   |   | 3 |   |   |   |   |   |   |   | 4 |   | 2 |   | 4 |   |   |           |                 |            |
| Infiltration Cellular, Plasma Cell                     | 4           |   |   |   |   | 3 |   |   |   |   |   |   |   | 3 |   | 4 |   | 3 |   | 4 |           |                 |            |
| Lymph Node, Mesenteric                                 |             |   |   | + |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |           |                 |            |
| Spleen   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |           |                 |            |
| Hematopoietic Cell Proliferation                       |             |   | 2 |   |   |   | 4 | 2 |   |   |   |   | 3 | 3 |   |   |   | 1 |   | 2 | 2         |                 |            |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>45</b>       |            |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>12</b>       | <b>2.4</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |           |            |            |
|--------------------------------|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|-----------|------------|------------|
|                                |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |           |            |            |
|                                |  | 7           | 4 | 4 | 5 | 7 | 6 | 7 | 3 | 2 | 5 | 6 | 5 | 6 | 5 | 4 | 6 | 5 | 7 | 4 | 2 | 4               |           |            |            |
|                                |  | 2           | 7 | 9 | 4 | 1 | 8 | 2 | 5 | 5 | 4 | 4 | 3 | 0 | 9 | 4 | 1 | 3 | 2 | 6 | 9 | 8               |           |            |            |
|                                |  | 8           | 5 | 3 | 5 | 5 | 5 | 8 | 9 | 4 | 0 | 0 | 8 | 1 | 4 | 6 | 5 | 1 | 7 | 6 | 5 | 1               |           |            |            |
|                                |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |           |            |            |
|                                |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1               |           |            |            |
|                                |  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |           |            |            |
|                                |  | 3           | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |           |            |            |
|                                |  | 5           | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5               |           |            |            |
|                                |  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2               |           |            |            |
|                                |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |           |            |            |
| Hyperplasia, Lymphoid Necrosis |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2               |           | <b>3</b>   | <b>2.0</b> |
| Pigmentation                   |  | 2           | 2 | 2 |   | 2 |   |   | 1 | 2 |   |   |   | 2 |   |   |   | 1 | 2 | 2 |   |                 | <b>22</b> | <b>2.3</b> |            |
| Polyarteritis                  |  |             | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 | <b>1</b>  | <b>1.0</b> |            |
| Thymus Atrophy                 |  | +           | + | + | M | + | + | + | + | + | + | + | + | M | + | + | + | + | + | A | + | <b>42</b>       |           |            |            |
| Hemorrhage                     |  | 4           | 3 | 3 |   | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 |   | 3 | 4 | 4 | 3 | 4 |   | 3               | <b>38</b> | <b>3.9</b> |            |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |            |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|------------|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | <b>45</b> |            |
| Alveolus, Degeneration             |   |   | 3 | 4 | 2 |   |   | 4 |   |   | 4 | 4 |   | 2 |   |   | 3 | 3 |   |   | 4 | <b>23</b> | <b>3.3</b> |
| Alveolus, Dilatation               | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | <b>7</b>  | <b>2.3</b> |
| Duct, Dilatation                   | 2 |   |   |   | 3 | 3 | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   | 3 |   | <b>12</b> | <b>2.7</b> |
| Skin                               |   |   |   | + | + |   | + |   | + |   | + | + |   |   | + | + |   |   |   |   |   | <b>16</b> |            |
| Abscess                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Angiectasis                        |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Cyst Epithelial Inclusion          |   |   |   | X |   |   |   |   | X |   |   | X |   |   |   |   | X |   |   |   |   | <b>10</b> |            |
| Hemorrhage                         |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Inflammation, Suppurative          |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Inflammation, Granulomatous        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |
| Ulcer                              |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>2.0</b> |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |
| Foot, Edema                        |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  | <b>4.0</b> |
| Foot, Fibrosis                     |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |
| Foot, Inflammation, Chronic Active |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |
| Foot, Necrosis                     |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |
| Foot, Ulcer                        |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  | <b>4.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |                 |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|  | 0728        | 0475 | 0493 | 0545 | 0715 | 0675 | 0738 | 0325 | 0254 | 0544 | 0043 | 0608 | 0561 | 0549 | 0465 | 0531 | 0727 | 0466 | 0295 | 0481 |           |                 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0635      |                 |
|  | 6           | 6    | 6    | 6    | 6    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 0    | 0    | 0    | 0    | 3352      |                 |
|  | 3           | 3    | 3    | 3    | 3    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5621      |                 |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    | 2121      |                 |
|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | <b>* TOTALS</b> |

**MUSCULOSKELETAL SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Bone                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |     |
| Tarsal, Hyperostosis         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 4.0 |
| Bone, Femur                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |   |     |
| Fibrous Osteodystrophy       |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |    | 2 | 2.0 |
| Skeletal Muscle              | + |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   | 3  |   |     |
| Fibrosis                     | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 4.0 |
| Hemorrhage                   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 4.0 |
| Inflammation, Chronic Active | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 4.0 |
| Necrosis                     | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 4.0 |

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |   |     |
| Compression               |   |   |   |   | 3 | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |    | 8 | 2.4 |
| Cyst                      |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |    | 2 |     |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |   |     |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |   |     |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 | 2.0 |
| Nerve Trigeminal          | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   | 3  |   |     |
| Axon, Degeneration        | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 | 3.0 |
| Peripheral Nerve, Sciatic | + |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   | 3  |   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | ANIMAL ID | * TOTALS |     |
|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|----------|-----|
|  | 078         | 045 | 049 | 054 | 071 | 068 | 073 | 082 | 085 | 094 | 005 | 066 | 053 | 060 | 094 | 046 | 065 | 073 | 044 | 022 |           |          | 044 |
|  | 0           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0         | 06352    |     |

Peripheral Nerve, Tibial

+ + 3

Spinal Cord, Cervical

+ + 3

Spinal Cord, Lumbar  
Axon, Degeneration

+ + 3 2 2.5

Spinal Cord, Thoracic  
Hemorrhage

+ + 3 1 1.0

RESPIRATORY SYSTEM

|   |           |           |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    |        |
|---|-----------|-----------|-------|---|---|--|--|---|---|---|---|---|---|---|---|--|--|--|--|--|---|----|--------|
| Lung  | + + + + + | + + + + + | + + + |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   | 38 |        |
| Foreign Body  |           | X         |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 2      |
| Infiltration Cellular, Histiocyte                     | 2         |           |       | 2 |   |  |  |   |   |   |   | 1 | 4 |   |   |  |  |  |  |  |   |    | 5 2.6  |
| Inflammation, Granulomatous                           |           | 4         |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 3 3.0  |
| Inflammation, Chronic                                 |           |           |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  | 3 |    | 1 3.0  |
| Metaplasia, Osseous                                   |           |           |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 1 1.0  |
| Nose  | + + + + + | + + + + + | + + + |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 37     |
| Cyst Epithelial Inclusion                             |           |           |       |   |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 1      |
| Fibrous Osteodystrophy                                |           |           |       |   |   |  |  |   |   |   |   |   | 2 |   |   |  |  |  |  |  |   |    | 2 2.0  |
| Foreign Body  |           |           |       | X |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  |   |    | 2      |
| Inflammation, Suppurative                             |           |           |       | 2 |   |  |  |   |   |   |   |   |   |   |   |  |  |  |  |  | 2 |    | 5 2.4  |
| Inflammation, Chronic Active                          |           |           |       |   |   |  |  |   |   |   |   | 4 |   |   |   |  |  |  |  |  |   |    | 1 4.0  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |           |           |       |   | 3 |  |  | 2 | 3 | 4 | 3 |   | 3 | 2 | 2 |  |  |  |  |  |   | 3  | 13 2.7 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |           |           |       |   |   |  |  |   |   |   |   | 3 | 3 |   |   |  |  |  |  |  |   |    | 5 2.4  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 078         | 045   | 049   | 054   | 057   | 068   | 073   | 082   | 085   | 094   | 098   | 105   | 116   | 123   | 134   | 141   | 150   | 167   | 174   | 185   |          |
| ANIMAL ID  | 06352       | 06336 | 06333 | 06333 | 06331 | 06311 | 06322 | 06322 | 06300 | 06311 | 06322 | 06322 | 06322 | 06333 | 06333 | 06344 | 06344 | 06355 | 06355 | 06322 |          |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |             |       |       |       |       |       |       |       |       |       | 2     | 2     |       |       |       |       |       |       | 2     |       | 4 2.0    |
| Respiratory Epithelium, Ulcer                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Transitional Epithelium, Accumulation, Hyaline Droplet |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Upper Molar, Fibrosis                                  |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Trachea  |             | +     | +     | +     | +     | +     |       | +     | +     | +     | A     | +     | +     | +     | +     | +     |       | +     | A     | +     | 33       |
| <b>SPECIAL SENSES SYSTEM</b>                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Eye  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Retina, Degeneration                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Zymbal's Gland   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Cyst, Squamous   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| <b>URINARY SYSTEM</b>                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Kidney   |             | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 45       |
| Accumulation, Hyaline Droplet                          |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 4.0    |
| Casts Protein  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Infiltration Cellular, Polymorphonuclear               |             |       |       |       |       |       |       |       |       | 1     |       |       |       |       | 2     |       |       |       |       |       | 5 1.8    |
| Mineralization   |             |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       | 3 3.3    |
| Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 4.0    |
| Nephropathy  | 4           | 4     | 1     |       | 4     | 4     | 1     | 1     |       | 4     | 4     | 2     | 3     | 4     | 2     | 2     | 4     | 4     | 3     |       | 39 2.9   |
| Polyarteritis  |             |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Cortex, Cyst   | X           |       |       |       |       |       |       |       |       |       |       | X     |       |       | X     |       |       |       | X     |       | 10       |
| Pelvis, Dilatation                                     |             |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       | 3 2.0    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS MALE<br>F1 25000StDose M | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|
|  | 0728        | 0475  | 0493  | 0545  | 0715  | 0675  | 0738  | 0325  | 0254  | 0544  | 0630  | 0658  | 0564  | 0465  | 0531  | 0727  | 0466  | 0265  | 0498  | 0241  |          |     |
| ANIMAL ID  | 06352       | 06332 | 06332 | 06331 | 06311 | 06811 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 |          |     |
| Renal Tubule, Cyst                                     | X           |       |       |       |       |       |       |       | X     | X     |       |       |       | X     | X     |       | X     |       |       |       | 18       |     |
| Renal Tubule, Dilatation                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 3.0 |
| Renal Tubule, Hyperplasia, Atypical                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 2.0 |
| Transitional Epithelium, Hyperplasia                   |             |       |       |       | 2     |       |       |       | 2     |       |       |       | 2     |       | 3     |       | 2     |       |       |       | 10       | 1.9 |
| Urinary Bladder  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |     |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 3.5 |
| Inflammation, Chronic Active                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 3.0 |
| Lumen, Dilatation                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       | 4        | 4.0 |

\*\*\* END OF MALE DATA \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| DAY ON TEST                          |  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | females<br>(cont...) |   |
|--------------------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |  | 5   | 5   | 2   | 2   | 1   | 7   | 7   | 2   | 9   | 2   | 1   | 4   | 2   | 1   | 3   | 2   | 0   | 2   | 2   | 2   | 7   | 4   | 8   | 2   | 6   | 5   |                      | 9 |
| F1 Veh. Ctrl F                       |  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |                      | 0 |
| ANIMAL ID                            |  | 000 | 000 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002                  |   |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + |   |   |   | + | + | + |   |   | + |   |   |   | + | + | + | + |   |   | + | + | + | + | + |   |   |   |
| Intestine Large, Cecum                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon                  | + | + |   |   |   | + | + | + |   |   | + | + | + |   | + | + | + | A |   |   |   | + | + | + | + | + |   |   |
| Intestine Small, Ileum                  | + | + |   |   |   | + | + | + |   |   | + |   | A |   | + | + | + |   |   |   | A |   | + | + | + | + | + |   |
| Intestine Small, Jejunum                |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   |   |   |   |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                        | X |   |   |   |   |   |   | X |   | X |   | X |   | X | X |   |   |   |   |   |   |   |   |   | X | X | X | X |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                            | 3 | 3 | 3 | 3 | 2 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fibrosis                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 1 | 1 | 2 | 2 | 1 | 1 |   |   |   | 1 | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|------|
|  | 0652        | 0595 | 0727 | 0727 | 0661 | 0667 | 0667 | 0722 | 0492 | 0722 | 0726 | 0726 | 0726 | 0726 | 0671 | 0676 | 0507 | 0662 | 0721 | 0727 |           |                      | 0574 | 0664 | 0661 | 0565 | 0666 | 0599 |
| Degeneration, Cystic Hyperplasia                       | 4           | 2    | 1    | 2    | 2    |      | 4    | 3    | 1    | 3    |      |      | 2    | 4    | 3    |      | 2    |      | 4    | 1    | 4         | 2                    |      |      |      |      |      |      |
| Hypertrophy  |             |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Vacuolization Cytoplasmic                              |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Adrenal Medulla Hyperplasia                            | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    | +    | +    | +    |
| Islets, Pancreatic                                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    | +    | +    | +    |
| Parathyroid Gland Hyperplasia                          | +           | +    | +    | +    | +    | +    | 1    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    | +    | +    | +    |
| Pituitary Gland Angiectasis                            | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    | +    | +    | +    |
| Pars Distalis, Cyst                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Pars Distalis, Hyperplasia                             | 3           | 3    | 3    | 3    |      |      | X    |      |      | X    |      |      |      | X    |      |      |      |      | X    | X    |           |                      |      |      | X    | X    |      |      |
| Pars Distalis, Vacuolization Cytoplasmic               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Pars Intermedia, Cyst                                  | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Thyroid Gland Ultimobranchial Cyst                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    | +    | +    | +    |
| C-cell, Hyperplasia                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |
| Follicular Cell, Hyperplasia                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |      |      |      |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|  | 0652        | 0595 | 0727 | 0727 | 0669 | 0666 | 0672 | 0472 | 0766 | 0476 | 0476 | 0676 | 0767 | 0665 | 0666 | 0777 | 0777 | 0574 | 0666 | 0666 | 0565 | 0666 | 0559 | 0559 |                      |
| ANIMAL ID  | 0001        | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 | 0001 | 0002 |                      |
| Clitoral Gland   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Hyperkeratosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Inflammation, Suppurative                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Duct, Dilatation                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Fat Pad, Ovarian/parametrial                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Ovary  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |      |                      |
| Atrophy  | 2           | 2    | 3    | 2    | 2    | 3    | 2    | 3    | 2    | 4    | 3    |      | 3    | 2    | 3    | 2    | 2    | 2    | 3    | 4    | 2    | 2    | 2    | 2    |                      |
| Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |                      |
| Hyperplasia, Sertoliform                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |                      |
| Bilateral, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Bilateral, Follicle, Cyst                              |             |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |                      |
| Follicle, Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      | X    |      |      |      |                      |
| Oviduct  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Uterus   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Adenomyosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Infiltration Cellular, Polymorphonuclear               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Metaplasia, Squamous                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrial Glands, Hyperplasia                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Hyperplasia, Cystic                       | 2           | 1    | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Lumen, Dilatation                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Vagina   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                  |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |           | 6 | 5 | 7 | 7 | 6 | 6 | 6 | 7 | 4 | 7 | 6 | 4 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 6 | 6 | 5 | 5 |   |
|  |           | 5 | 9 | 2 | 2 | 1 | 7 | 7 | 2 | 9 | 2 | 1 | 4 | 2 | 1 | 3 | 2 | 0 | 2 | 2 | 2 | 7 | 4 | 2 | 6 | 9 |   |
|  |           | 2 | 5 | 7 | 7 | 9 | 3 | 2 | 6 | 7 | 6 | 6 | 7 | 6 | 5 | 1 | 7 | 7 | 6 | 1 | 7 | 4 | 8 | 1 | 5 | 9 |   |
| <b>F1 Veh. Ctrl F</b>                        | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|  |           | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|  |           | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 2 | 3 |   |
|  |           | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |
|  |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

females  
(cont...)

Atrophy  
Infiltration Cellular, Polymorphonuclear  
Epithelium, Degeneration  
Epithelium, Hyperplasia  
Epithelium, Mucification

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**HEMATOPOIETIC SYSTEM**

Bone Marrow  
Hypocellularity  
  
Lymph Node  
Axillary, Degeneration, Cystic  
Axillary, Hyperplasia, Lymphoid  
Lumbar, Degeneration, Cystic  
Lumbar, Hyperplasia, Lymphoid  
Lumbar, Infiltration Cellular, Plasma Cell  
Mediastinal, Hemorrhage  
Mediastinal, Pigmentation  
Renal, Degeneration, Cystic  
Renal, Hemorrhage  
Renal, Hyperplasia, Lymphoid  
Renal, Infiltration Cellular, Plasma Cell  
Renal, Pigmentation

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Lymph Node, Mandibular  
Degeneration, Cystic  
Hyperplasia, Lymphoid  
Infiltration Cellular, Plasma Cell

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 0652        | 0595  | 0727  | 0727  | 0669  | 0666  | 0672  | 0492  | 0726  | 0476  | 0647  | 0726  | 0615  | 0766  | 0650  | 0662  | 0722  | 0727  | 0574  | 0648  | 0621  | 0565  | 0559  |                      |
| ANIMAL ID  | 00091       | 00092 | 00001 | 00001 | 00001 | 00001 | 00001 | 00001 | 00001 | 00002 | 00002 | 00002 | 00002 | 00002 | 00002 | 00002 | 00002 | 00002 | 00002 | 00004 | 00004 | 00004 | 00004 | 00004                |

Lymph Node, Mesenteric

+

Spleen  
Hematopoietic Cell Proliferation  
Necrosis  
Pigmentation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| 1 | 2 |   | 3 |   | 2 | 3 |   | 1 |   |   | 2 | 1 |   |   | 2 | 2 |   |   |   | 3 | 3 | 4 | 1 | 2 |
| 1 | 1 | 3 |   | 2 | 2 | 2 |   |   | 2 | 3 | 3 | 2 | 2 | 2 |   |   |   | 4 | 2 | 2 |   | 1 |   |   |

Thymus  
Atrophy  
Cyst  
Hemorrhage

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 |
|   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**INTEGUMENTARY SYSTEM**

Mammary Gland  
Atypical Focus  
Hyperplasia, Lobular  
Alveolus, Dilatation  
Duct, Dilatation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| 4 | 1 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 4 |   | 4 | 3 | 4 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 3 |
|   |   | 2 |   |   |   | 2 | 2 |   | 2 | 2 |   |   |   |   | 2 | 2 |   |   |   | 2 |   |   |   |

Skin  
Epithelium, Foot, Hyperplasia  
Foot, Bacterium  
Foot, Edema  
Foot, Fibrosis  
Foot, Inflammation, Chronic Active  
Foot, Necrosis  
Foot, Ulcer

|   |   |   |   |   |  |  |  |  |   |  |  |  |  |   |   |   |  |   |   |  |  |   |   |
|---|---|---|---|---|--|--|--|--|---|--|--|--|--|---|---|---|--|---|---|--|--|---|---|
| + | + | + | + |   |  |  |  |  | + |  |  |  |  |   | + | + |  |   | + |  |  | + | + |
| 4 | 4 | 4 | 4 |   |  |  |  |  | 4 |  |  |  |  |   | 4 |   |  |   | 4 |  |  | 4 | 4 |
|   |   | X |   |   |  |  |  |  |   |  |  |  |  |   |   |   |  |   |   |  |  |   |   |
| 4 |   |   |   | 3 |  |  |  |  |   |  |  |  |  | 3 |   |   |  | 4 |   |  |  | 4 | 4 |
| 4 | 4 | 4 | 4 |   |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  | 4 |   |  |  | 4 | 4 |
| 4 | 4 | 4 | 4 |   |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  | 4 |   |  |  | 4 | 4 |
| 4 | 4 | 4 | 4 |   |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  | 4 |   |  |  | 4 | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                          |  |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|--|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE | 6 | 5 | 7 | 7 | 6 | 6 | 6 | 7 | 4 | 7 | 6 | 4 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 5 | 6 | 6 | 5 | 5                        |  |
| F1 Veh. Ctrl F                       | 5 | 9 | 2 | 2 | 1 | 7 | 7 | 2 | 9 | 2 | 1 | 4 | 2 | 1 | 3 | 2 | 0 | 2 | 2 | 2 | 7 | 4 | 4 | 6 | 9                        |  |
| ANIMAL ID                            | 2 | 5 | 7 | 7 | 9 | 3 | 2 | 6 | 7 | 6 | 6 | 7 | 6 | 5 | 1 | 7 | 7 | 6 | 1 | 7 | 4 | 8 | 1 | 5 | 9                        |  |
|                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                        |  |
|                                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4                        |  |
|                                      | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 |                          |  |
|                                      | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 3 |                          |  |
|                                      | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | <b>females (cont...)</b> |  |

MUSCULOSKELETAL SYSTEM

Bone

Joint, Edema

Bone, Femur

Skeletal Muscle

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

Brain, Brain Stem

Compression

Hemorrhage

Brain, Cerebellum

Brain, Cerebrum

Ventricle, Dilatation

Nerve Trigeminal

Axon, Degeneration

Peripheral Nerve, Sciatic

Peripheral Nerve, Tibial

Spinal Cord, Cervical

Axon, Degeneration

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   | 4 | 3 |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | + | + | + | + | + | + | + | + | + | 2 | 1 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |
|  |   |   | + |   |   |   |   |   | + | + |   | + |   |   |   |   |   |   |   | + |   |   |   | + |
|  |   |   | 3 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |
|  |   |   | + |   |   |   |   |   | + | + |   | + |   |   |   |   |   |   |   |   | + |   |   | + |
|  |   |   | + |   |   |   |   |   | + | + |   | + |   |   |   |   |   |   |   |   | + |   |   | + |
|  |   |   | + |   |   |   |   |   | + | + |   | + |   |   |   |   |   |   |   |   | + |   |   | + |
|  |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



|  |                       | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |                       | 0<br>6<br>5<br>2      | 0<br>5<br>9<br>5      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>1<br>9      | 0<br>6<br>7<br>3      | 0<br>6<br>7<br>2      | 0<br>7<br>2<br>6      | 0<br>4<br>9<br>7      | 0<br>7<br>2<br>6      | 0<br>6<br>2<br>6      | 0<br>7<br>1<br>6      | 0<br>4<br>2<br>4      | 0<br>7<br>3<br>1      | 0<br>6<br>2<br>7      | 0<br>5<br>0<br>7      | 0<br>6<br>2<br>6      | 0<br>7<br>2<br>1      | 0<br>7<br>2<br>7      | 0<br>5<br>7<br>4      | 0<br>6<br>4<br>8      | 0<br>6<br>2<br>1      | 0<br>5<br>6<br>5      | 0<br>5<br>9<br>9      |                       |                       |
|  | <b>F1 Veh. Ctrl F</b> | 0<br>0<br>0<br>9<br>1 | 0<br>0<br>0<br>9<br>2 | 0<br>0<br>1<br>0<br>1 | 0<br>0<br>1<br>0<br>1 | 0<br>0<br>1<br>1<br>2 | 0<br>0<br>1<br>1<br>1 | 0<br>0<br>1<br>2<br>1 | 0<br>0<br>1<br>2<br>2 | 0<br>0<br>1<br>3<br>1 | 0<br>0<br>1<br>3<br>5 | 0<br>0<br>1<br>5<br>1 | 0<br>2<br>2<br>5<br>2 | 0<br>2<br>2<br>6<br>1 | 0<br>2<br>2<br>6<br>2 | 0<br>2<br>2<br>7<br>1 | 0<br>2<br>2<br>7<br>2 | 0<br>2<br>2<br>8<br>1 | 0<br>2<br>2<br>8<br>2 | 0<br>2<br>2<br>9<br>1 | 0<br>2<br>2<br>9<br>2 | 0<br>4<br>4<br>1<br>2 | 0<br>4<br>4<br>1<br>2 | 0<br>4<br>4<br>1<br>2 | 0<br>4<br>4<br>2<br>1 | 0<br>4<br>4<br>2<br>2 | 0<br>4<br>4<br>2<br>3 |

Retina, Degeneration

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Accumulation, Hyaline Droplet        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |
| Casts Protein                        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   | 1 |   |   |   |   |   |
| Fibrosis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                       |   | 2 | 2 | 1 |   |   | 1 | 1 | 2 | 1 | 2 | 1 |   |   |   |   | 2 |   | 1 | 1 |   | 1 |   | 1 | 1 | 1 |   |
| Nephropathy                          |   | 1 |   |   | 1 |   |   |   | 1 |   | 1 |   |   |   |   |   |   | 1 | 1 |   |   | 1 |   | 3 |   | 1 | 1 |
| Cortex, Cyst                         |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |
| Renal Tubule, Cyst                   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |
| Renal Tubule, Necrosis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Transitional Epithelium, Hyperplasia |   |   |   | 2 |   |   | 1 | 1 |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|  | 0727        | 0728  | 0728  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  |          | 0729  |
| ANIMAL ID  | 04432       | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432 | 04432    | 04432 |

|                        |   |     |
|------------------------|---|-----|
| Hepatocyte, Necrosis   | 1 | 1.0 |
| Oval Cell, Hyperplasia | 2 | 1.0 |

|               |   |     |
|---------------|---|-----|
| Mesentery     | 2 |     |
| Fat, Necrosis | 4 | 4.0 |

|                                   |    |     |
|-----------------------------------|----|-----|
| Pancreas                          | 50 |     |
| Basophilic Focus                  |    | 3   |
| Infiltration Cellular, Lymphocyte | 35 | 1.6 |
| Inflammation, Chronic Active      | 2  | 2.0 |
| Lipomatosis                       | 6  | 3.2 |
| Pigmentation                      | 11 | 1.1 |
| Acinus, Degeneration              | 34 | 2.4 |

|                      |    |     |
|----------------------|----|-----|
| Stomach, Forestomach | 34 |     |
| Stomach, Glandular   | 34 |     |
| Pigmentation         | 1  | 3.0 |

CARDIOVASCULAR SYSTEM

|                |    |     |
|----------------|----|-----|
| Blood Vessel   | 50 |     |
| Heart          | 50 |     |
| Cardiomyopathy | 35 | 1.3 |

ENDOCRINE SYSTEM

|                                   |    |     |
|-----------------------------------|----|-----|
| Adrenal Cortex                    | 50 |     |
| Accessory Adrenal Cortical Nodule |    | 1   |
| Angiectasis                       | 9  | 2.8 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |           | * TOTALS  |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----------|-----------|
|  | 0727        | 0728  | 0728  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729  | 0729     | 0729      |           |
| ANIMAL ID  | 04432       | 04441 | 04442 | 04451 | 04452 | 04461 | 04462 | 04467 | 04471 | 04472 | 04477 | 04481 | 04482 | 04487 | 04491 | 04492 | 04497 | 04501 | 04502 | 04507 | 04511 | 04512 | 04517 | 04521    | 04522     | 04527     |
| Degeneration, Cystic Hyperplasia                       | 3           | 2     | 4     |       |       | 4     | 3     | 2     | 3     | 4     |       | 3     | 4     | 2     | 2     |       |       |       |       |       | 3     |       |       |          | 4         | <b>31</b> |
| Hypertrophy  |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       | 1     | 1     |       |       |       |       |       |       |       |          | 1         | <b>7</b>  |
| Vacuolization Cytoplasmic                              |             |       |       | 2     |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 3        | <b>5</b>  |           |
|  |             |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     | <b>3</b> |           |           |
| Adrenal Medulla Hyperplasia                            | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +         | <b>50</b> |
|  |             | 1     | 1     | 1     |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       | 1     |       |       |          | <b>8</b>  |           |
| Islets, Pancreatic                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +         | <b>50</b> |
| Parathyroid Gland Hyperplasia                          | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +         | <b>50</b> |
|  |             |       |       |       |       |       | 1     |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |          | <b>4</b>  |           |
| Pituitary Gland Angiectasis                            | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +         | <b>50</b> |
| Pars Distalis, Cyst                                    |             |       |       |       |       |       | 4     |       | 4     |       |       |       |       | 4     |       |       |       |       |       |       | 4     |       | 4     | 4        | <b>10</b> |           |
| Pars Distalis, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |          | <b>9</b>  |           |
| Pars Distalis, Vacuolization Cytoplasmic               |             |       |       |       |       |       |       |       |       |       |       |       | 3     | 4     |       |       |       |       | 4     | 3     |       |       | 2     | 4        | <b>27</b> |           |
| Pars Intermedia, Cyst                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     | 3        | <b>1</b>  |           |
| Thyroid Gland Ultimobranchial Cyst                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | <b>50</b> |           |
| C-cell, Hyperplasia                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | <b>8</b>  |           |
| Follicular Cell, Hyperplasia                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | <b>22</b> |           |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | <b>1</b>  |           |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
|  | 0727        | 0728 | 0728 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 | 0729 |          | 0729 |
|  | 4432        | 4432 | 4432 | 4432 | 4431 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 | 4432 |          | 4432 |
| Clitoral Gland   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7        |      |
| Hyperkeratosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2 3.5    |      |
| Inflammation, Suppurative                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 6 2.7    |      |
| Duct, Dilatation                                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7 3.4    |      |
| Fat Pad, Ovarian/parametrial                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        |      |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 3.0    |      |
| Ovary  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 50       |      |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 47 2.7   |      |
| Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4        |      |
| Hyperplasia, Sertoliform                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4 1.0    |      |
| Bilateral, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2        |      |
| Bilateral, Follicle, Cyst                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        |      |
| Follicle, Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3        |      |
| Oviduct  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 47       |      |
| Uterus   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 50       |      |
| Adenomyosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 4.0    |      |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 7 3.0    |      |
| Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        |      |
| Infiltration Cellular, Polymorphonuclear               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 1.0    |      |
| Metaplasia, Squamous                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2 1.5    |      |
| Endometrial Glands, Hyperplasia                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 2.0    |      |
| Endometrium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 10 1.8   |      |
| Endometrium, Hyperplasia, Cystic                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 30 2.2   |      |
| Lumen, Dilatation                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2 4.0    |      |
| Vagina   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 49       |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--|
|  | ANIMAL ID   | 7 | 7 | 7 | 7 | 5 | 5 | 4 | 6 | 6 | 7 | 6 | 7 | 4 | 6 | 4 | 5 | 6 | 7 | 5 | 4 | 5 | 7 | 4 | 7 | 5 | 7 | 5 |          |  |
|  |             | 2 | 2 | 2 | 2 | 0 | 6 | 7 | 7 | 2 | 6 | 2 | 8 | 7 | 5 | 0 | 4 | 2 | 7 | 3 | 3 | 2 | 9 | 3 | 3 | 8 | 8 | 9 |          |  |
|  |             | 7 | 8 | 8 | 9 | 7 | 7 | 8 | 4 | 4 | 7 | 8 | 7 | 9 | 3 | 1 | 7 | 9 | 7 | 0 | 2 | 9 | 8 | 6 | 0 | 9 | 9 |   |          |  |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |  |
|  |             | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |          |  |
|  |             | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |          |  |
|  |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 |          |  |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 |          |  |

|   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |    |     |     |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---|----|-----|-----|
| Atrophy   |  |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |  |  |   |   |   |   |   |    | 1   | 3.0 |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |  |   | 3 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |  |  |   | 3 |   | 4 |   |    | 7   | 3.1 |
| Epithelium, Hyperplasia   |  |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |    | 1   | 3.0 |
| Epithelium, Mucification  |  | 3 | 2 | 3 | 2 | 2 |   | 2 | 2 | 2 | 4 | 4 | 3 | 3 |   | 3 | 4 | 4 | 4 | 4 |  |  | 3 | 4 | 4 | 3 | 3 | 2  | 4   | 3.0 |
|   |  | 3 | 2 | 3 | 2 | 2 |   | 2 | 2 | 2 | 4 | 4 | 3 | 3 |   | 3 | 4 | 4 | 4 | 4 |  |  | 4 | 4 | 3 | 3 | 2 | 46 | 3.2 |     |

**HEMATOPOIETIC SYSTEM**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     |     |     |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|----|--|----|-----|-----|-----|--|
| Bone Marrow Hypocellularity                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  | 50 |  |    |     |     |     |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  | 2  | 3.5 |     |     |  |
| Lymph Node                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  | 12 |     |     |     |  |
| Axillary, Degeneration, Cystic             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 1   | 3.0 |     |  |
| Axillary, Hyperplasia, Lymphoid            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 1   | 2.0 |     |  |
| Lumbar, Degeneration, Cystic               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 2 |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  | 2  | 3.0 |     |     |  |
| Lumbar, Hyperplasia, Lymphoid              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 3 |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |    |  | 6  | 3.5 |     |     |  |
| Lumbar, Infiltration Cellular, Plasma Cell |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 5   | 4.0 |     |  |
| Mediastinal, Hemorrhage                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 1   | 3.0 |     |  |
| Mediastinal, Pigmentation                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 1   | 4.0 |     |  |
| Renal, Degeneration, Cystic                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    | 1   | 2.0 |     |  |
| Renal, Hemorrhage                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 1   | 3.0 |  |
| Renal, Hyperplasia, Lymphoid               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 1   | 2.0 |  |
| Renal, Infiltration Cellular, Plasma Cell  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 1   | 4.0 |  |
| Renal, Pigmentation                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 1   | 3.0 |  |
| Lymph Node, Mandibular                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 5   |     |  |
| Degeneration, Cystic                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 1   | 4.0 |  |
| Hyperplasia, Lymphoid                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 3   | 2.7 |  |
| Infiltration Cellular, Plasma Cell         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |    |  |    |     | 3   | 3.7 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                       | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |   |
|--|-----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|
|  |                       | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0 |   |   |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |                       | 7           | 7 | 7 | 7 | 5 | 5 | 4 | 6 | 6 | 7 | 6 | 7 | 4 | 6 | 4 | 5 | 6 | 7 | 5 | 4 | 5        | 7 | 4 | 7 | 5 |
|  | <b>F1 Veh. Ctrl F</b> | 2           | 2 | 2 | 2 | 0 | 6 | 7 | 7 | 7 | 2 | 6 | 2 | 8 | 7 | 5 | 0 | 4 | 2 | 7 | 3 | 3        | 2 | 9 | 3 | 8 |
|  | ANIMAL ID             | 7           | 8 | 8 | 9 | 7 | 7 | 8 | 4 | 4 | 7 | 8 | 7 | 9 | 3 | 1 | 7 | 9 | 7 | 0 | 2 | 9        | 8 | 6 | 0 | 9 |
|  |                       | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0 |
|  |                       | 4           | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8        | 8 | 8 | 8 | 8 |
|  |                       | 4           | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 4 | 4 |   |
|  |                       | 3           | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3        | 3 | 4 | 4 |   |
|  |                       | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2        | 3 | 2 | 1 | 2 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|---|----|-----|
| Lymph Node, Mesenteric           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 2  |    |     |   |    |     |
| Spleen                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |   |    |     |
| Hematopoietic Cell Proliferation |   | 2 | 1 | 2 | 4 |   | 4 |   |   | 3 | 4 |   |   |   | 3 |   |   |   |   | 2 | 4 | 2 |   | 2 | 2  | 28 | 2.4 |   |    |     |
| Necrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |    | 1  | 4.0 |   |    |     |
| Pigmentation                     | 3 | 1 |   | 2 |   |   |   | 4 | 4 |   |   | 4 | 4 | 1 | 2 | 2 |   |   | 3 | 3 | 1 |   | 1 | 4 |    | 32 | 2.3 |   |    |     |
| Thymus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |     |   |    |     |
| Atrophy                          | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 3 | 3 |   |   | 4 | 4 | 2 | 4 | 4 | 4 | 4  | 4  | 4   | 4 | 47 | 3.8 |
| Cyst                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  |     |   |    |     |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 3.0 |   |    |     |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Atypical Focus                     |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |
| Hyperplasia, Lobular               | 4 | 3 | 4 | 2 |   | 3 | 2 | 4 |   | 4 | 4 | 4 | 3 | 4 |   |   | 4 | 2 | 4 |   | 4 | 4 |   | 2 | 2 | 43 | 3.3 |
| Alveolus, Dilatation               | 2 | 2 |   | 3 |   | 2 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9  | 2.0 |
| Duct, Dilatation                   | 2 | 3 |   | 3 |   | 3 | 2 |   |   |   |   | 3 | 3 |   |   |   |   |   |   |   |   |   |   |   | 2 | 15 | 2.3 |
| Skin                               |   |   |   | + | + |   |   |   |   | + | + |   |   |   |   |   |   |   |   | + |   | + |   |   |   | 17 |     |
| Epithelium, Foot, Hyperplasia      |   |   |   | 4 | 4 |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   | 15 | 4.0 |
| Foot, Bacterium                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Foot, Edema                        |   |   |   | 4 | 4 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 4 |   |   | 10 | 3.7 |
| Foot, Fibrosis                     |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 4 |   | 15 | 4.0 |
| Foot, Inflammation, Chronic Active |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 4 |   | 15 | 4.0 |
| Foot, Necrosis                     |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 4 |   | 15 | 4.0 |
| Foot, Ulcer                        |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 4 |   | 15 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. Ctrl F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | ANIMAL ID   | 7 | 7 | 7 | 7 | 5 | 5 | 4 | 6 | 6 | 7 | 6 | 7 | 4 | 6 | 4 | 5 | 6 | 7 | 5 | 4 | 4 | 5 | 7 | 4 | 7 | 5 | 4 | 7 | 4 | 7 | 5 | 4 | 3 | 3 | 2 | 9 | 3 |
|  |             | 2 | 2 | 2 | 2 | 0 | 6 | 7 | 7 | 7 | 2 | 6 | 2 | 8 | 7 | 5 | 0 | 4 | 2 | 7 | 3 | 3 | 2 | 9 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 7 | 8 | 8 | 9 | 7 | 7 | 8 | 4 | 4 | 7 | 8 | 7 | 9 | 3 | 1 | 7 | 9 | 7 | 0 | 2 | 2 | 9 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|  |             | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|  |             | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| <b>* TOTALS</b>  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Spinal Cord, Lumbar  
Axon, Degeneration

+  
1

**7**  
**4 1.0**

Spinal Cord, Thoracic  
Axon, Degeneration

+

**7**  
**3 1.0**

**RESPIRATORY SYSTEM**

Lung  
Hemorrhage + **38**  
Infiltration Cellular, Histiocyte 2 2 1 3 **8 2.1**  
Alveolar Epithelium, Hyperplasia 2 **4 1.5**

Nose + + + + + + + + + + + + + + + + + + + **34**  
Inflammation, Suppurative 1 **1 1.0**  
Olfactory Epithelium, Accumulation, Hyaline Droplet 2 3 1 2 2 **8 2.3**  
Respiratory Epithelium, Accumulation, Hyaline Droplet 2 2 **2 2.0**  
Respiratory Epithelium, Hyperplasia, Goblet Cell 2 **1 2.0**  
Transitional Epithelium, Accumulation, Hyaline Droplet 3 **2 2.5**

Trachea + A + + + + + A + + + + + + + + + + + **32**

**SPECIAL SENSES SYSTEM**

Eye + **1**  
Cornea, Edema 3 **1 3.0**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



| DAY ON TEST                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |   |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|--|
| <b>SPRAGUE DAWLEY (NCTR)</b> | 7 | 7 | 7 | 7 | 5 | 5 | 4 | 6 | 6 | 7 | 6 | 7 | 4 | 6 | 4 | 5 | 6 | 7 | 5 | 4 | 5 | 7 | 4 | 7               | 5 |  |
| <b>RATS FEMALE</b>           | 2 | 2 | 2 | 2 | 0 | 6 | 7 | 7 | 7 | 2 | 6 | 2 | 8 | 7 | 5 | 0 | 4 | 2 | 7 | 3 | 3 | 2 | 9 | 3               | 8 |  |
| <b>F1 Veh. Ctrl F</b>        | 7 | 8 | 8 | 8 | 7 | 7 | 8 | 4 | 4 | 7 | 8 | 7 | 9 | 3 | 1 | 7 | 9 | 7 | 0 | 2 | 9 | 8 | 6 | 0               | 9 |  |
| <b>ANIMAL ID</b>             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               | 0 |  |
|                              | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8               | 8 |  |
|                              | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4               | 4 |  |
|                              | 3 | 4 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4               | 4 |  |
|                              | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1               | 2 |  |
|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |   |  |
| Retina, Degeneration         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>    |   |  |

URINARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |               |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b> |               |
| Accumulation, Hyaline Droplet        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 4.0</b>  |
| Casts Protein                        |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 |   |   |   | 1 |   |   | 1 |   |   |           | <b>8 1.0</b>  |
| Fibrosis                             |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b>  |
| Mineralization                       | 1 | 3 |   | 1 |   |   |   |   | 1 | 1 | 1 | 2 | 1 |   | 1 | 2 | 1 |   |   | 2 |   | 1 | 1 |   |           | <b>30 1.3</b> |
| Nephropathy                          | 1 |   |   | 1 | 1 |   |   |   |   |   |   | 1 |   |   | 1 | 1 |   |   |   |   |   |   | 1 | 1 |           | <b>19 1.1</b> |
| Cortex, Cyst                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |           | <b>5</b>      |
| Renal Tubule, Cyst                   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>9</b>      |
| Renal Tubule, Necrosis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1 3.0</b>  |
| Transitional Epithelium, Hyperplasia |   |   |   |   | 1 |   |   |   |   | 2 | 2 |   | 2 |   | 1 |   |   |   | 1 |   |   |   |   |   |           | <b>12 1.3</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>5<br>3<br>5      | 0<br>8<br>8<br>5      | 0<br>7<br>2<br>7      | 0<br>5<br>4<br>9      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>3<br>2<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>1<br>2      | 0<br>6<br>4<br>6      | 0<br>4<br>9<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>2<br>8<br>7      | 0<br>2<br>2<br>5      | 0<br>7<br>2<br>5      | 0<br>7<br>0<br>0      | 0<br>7<br>2<br>6      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>6      | 0<br>5<br>7<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      |                       |
| ANIMAL ID  | 0<br>0<br>2<br>5<br>1 | 0<br>0<br>2<br>5<br>2 | 0<br>0<br>2<br>6<br>1 | 0<br>0<br>2<br>6<br>2 | 0<br>0<br>2<br>7<br>1 | 0<br>0<br>2<br>8<br>2 | 0<br>0<br>2<br>8<br>1 | 0<br>0<br>2<br>9<br>2 | 0<br>0<br>2<br>9<br>1 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>3<br>2 | 0<br>2<br>4<br>3<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>5<br>2 | 0<br>2<br>4<br>5<br>1 | 0<br>4<br>5<br>7<br>2 | 0<br>4<br>5<br>7<br>1 | 0<br>4<br>5<br>8<br>2 | 0<br>4<br>5<br>8<br>1 |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + |   | + |   |   | + | + | + | + | + |   |   |   | + |   |   | + |   | + | + | + |   |   |
| Intestine Large, Colon Dilatation       | + | + |   | + |   |   | + | + | + | + | + |   |   |   | + |   |   | + |   | + | + | + |   |   |
| Intestine Small, Ileum                  | + | + |   | + |   |   | + | + | + | + | + |   |   |   | + |   |   | + |   | + | + | + |   |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Basophilic Focus                        |   |   |   | X | X | X |   | X | X | X | X |   | X | X | X |   | X | X |   |   |   | X |   |   |
| Basophilic Focus, Multiple              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Cholangiofibrosis                       |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   | X |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                            |   |   |   |   |   | 3 |   |   |   |   | 2 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |
| Hemorrhage                              |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Infiltration Cellular, Mononuclear Cell |   |   | 1 | 2 |   | 1 | 2 |   | 1 | 1 | 1 | 1 |   | 1 | 1 |   | 1 | 1 | 2 | 1 |   |   | 2 |   |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mitotic Alteration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 2 |   |   | 4 |   | 2 |   | 4 |   |   |
| Vacuolization Cytoplasmic               |   |   |   |   | 2 |   |   |   | 2 | 2 |   | 1 | 2 | 2 |   |   | 1 |   |   | 2 |   |   | 2 | 2 |
| Bile Duct, Hyperplasia                  |   |   | 2 |   | 1 | 1 |   | 2 | 1 |   |   |   | 1 |   |   |   | 1 | 2 | 1 |   |   |   |   | 2 |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |   | 1 |   |   |   |   |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>5<br>3<br>5      | 0<br>0<br>8<br>5      | 0<br>7<br>2<br>7      | 0<br>5<br>4<br>9      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>3<br>2<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>1<br>2      | 0<br>6<br>4<br>6      | 0<br>6<br>9<br>4      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>2<br>8<br>7      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>0      | 0<br>7<br>2<br>6      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>6      |                       |                       | 0<br>5<br>7<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      |
|  | 0<br>0<br>2<br>5<br>1 | 0<br>0<br>2<br>5<br>2 | 0<br>0<br>2<br>6<br>1 | 0<br>0<br>2<br>6<br>2 | 0<br>0<br>2<br>7<br>1 | 0<br>0<br>2<br>8<br>2 | 0<br>0<br>2<br>8<br>1 | 0<br>0<br>2<br>9<br>2 | 0<br>0<br>2<br>9<br>1 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>3<br>1 | 0<br>2<br>4<br>3<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>5<br>2 | 0<br>2<br>4<br>5<br>1 | 0<br>4<br>5<br>7<br>2 | 0<br>4<br>5<br>7<br>1 | 0<br>4<br>5<br>8<br>2 | 0<br>4<br>5<br>8<br>1 | 0<br>4<br>5<br>8<br>2 |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus                  |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Infiltration Cellular, Lymphocyte | 2 |   | 1 | 2 | 1 | 1 |   | 1 | 2 |   |   | 1 | 1 | 2 |   | 2 | 1 | 2 |   | 1 |   |   |   |   | 2 |
| Inflammation, Chronic Active      | 2 | 1 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lipomatosis                       |   |   |   | 3 |   | 2 |   |   |   |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                      |   |   |   | 1 | 1 |   |   | 1 |   |   |   |   | 1 | 1 |   | 1 | 1 |   | 1 |   |   |   |   |   |   |
| Acinus, Degeneration              | 3 | 1 | 1 | 4 | 2 | 2 |   | 2 | 2 |   |   | 1 | 1 | 2 | 4 |   | 3 | 1 | 2 |   | 1 |   |   |   | 3 |
| Stomach, Forestomach              | + | + |   | + |   |   | + | + | + | + | + | + | + |   | + |   |   | + |   | + | + | + |   |   |   |
| Stomach, Glandular                | + | + |   | + |   |   | + | + | + | + | + | + | + |   | + |   |   | + |   | + | + | + |   |   |   |

CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy |   | 1 | 4 |   | 2 | 1 |   |   |   |   | 1 | 1 |   | 1 | 2 | 1 |   | 2 |   | 3 |   | 1 | 1 | 3 | 1 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Angiectasis                       | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Degeneration, Cystic              | 4 |   |   | 1 |   | 4 |   |   | 3 | 2 | 4 | 2 | 4 | 4 |   | 4 | 2 | 1 |   | 4 | 4 | 2 |   | 3 |   |
| Hyperplasia                       |   |   | 2 | 1 | 1 |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   | 1 |   |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic         |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   |   |   | 1 |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>5<br>3<br>5      | 0<br>0<br>8<br>5      | 0<br>7<br>2<br>7      | 0<br>5<br>4<br>9      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>3<br>2<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>1<br>2      | 0<br>6<br>4<br>6      | 0<br>6<br>9<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>2<br>8<br>7      | 0<br>7<br>2<br>5      | 0<br>7<br>2<br>0      | 0<br>7<br>2<br>6      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>6      | 0<br>5<br>7<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      |                       |                      |
| ANIMAL ID  | 0<br>0<br>2<br>5<br>1 | 0<br>0<br>2<br>5<br>2 | 0<br>0<br>2<br>6<br>1 | 0<br>0<br>2<br>7<br>2 | 0<br>0<br>2<br>7<br>1 | 0<br>0<br>2<br>8<br>2 | 0<br>0<br>2<br>8<br>1 | 0<br>0<br>2<br>9<br>2 | 0<br>0<br>2<br>9<br>1 | 0<br>2<br>2<br>1<br>2 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>4<br>5<br>5<br>7 | 0<br>4<br>5<br>7<br>1 | 0<br>4<br>5<br>8<br>2 | 0<br>4<br>5<br>8<br>1 | 0<br>4<br>5<br>8<br>2 |                      |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hyperplasia<br>Hypertrophy        | 1 |   |   |   | 1 |   |   |   | 3 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic<br>Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland<br>Hyperplasia  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland<br>Angiectasis    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Cyst               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia        | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland<br>Fibrosis         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ultimobranhial Cyst               | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia               | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicular Cell, Hyperplasia      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**GENERAL BODY SYSTEM**

Tissue NOS

**GENITAL SYSTEM**

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperkeratosis            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | ANIMAL ID             | females<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>5<br>3<br>5 | 0<br>8<br>8<br>5 | 0<br>7<br>2<br>7 | 0<br>5<br>4<br>9 | 0<br>7<br>2<br>7 | 0<br>7<br>2<br>8 | 0<br>3<br>2<br>2 | 0<br>5<br>2<br>5 | 0<br>6<br>1<br>2 | 0<br>6<br>4<br>6 | 0<br>4<br>9<br>8 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>2<br>8 | 0<br>2<br>8<br>5 | 0<br>7<br>2<br>5 | 0<br>7<br>2<br>0 | 0<br>7<br>2<br>6 | 0<br>6<br>2<br>2 | 0<br>6<br>2<br>6 | 0<br>5<br>7<br>1 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 |                       |                       |                      |
| Ovary  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 0<br>0<br>2<br>5<br>1 | +                     |                      |
| Atrophy  | 4                |                  | 4                | 3                | 4                | 2                | 2                | 1                | 4                | 2                | 3                | 4                | 3                | 2                | 2                |                  | 2                | 2                | 2                | 3                | 2                | 4                | 2                | 3                     | 0<br>0<br>2<br>5<br>1 |                      |
| Cyst   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  | X                |                  |                  | X                     | 0<br>0<br>2<br>5<br>1 |                      |
| Hyperplasia, Sertoliform                             |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Polyarteritis  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Bilateral, Cyst                                      |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Bursa, Cyst  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Follicle, Cyst                                       |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Granulosa Cell, Hyperplasia                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                     | 0<br>0<br>2<br>5<br>1 |                      |
| Oviduct  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                     | 0<br>0<br>2<br>5<br>1 |                      |
| Uterus   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                     | 0<br>0<br>2<br>5<br>1 |                      |
| Adenomyosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Atrophy  |                  |                  | 4                |                  | 4                |                  |                  |                  |                  |                  | 3                |                  | 4                |                  | 3                | 3                |                  |                  |                  |                  | 3                |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Metaplasia, Squamous                                 | 1                |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Endometrial Glands, Hyperplasia                      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Endometrium, Cyst                                    |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Endometrium, Hyperplasia                             |                  |                  |                  |                  |                  | 1                |                  | 2                |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  | 2                     | 0<br>0<br>2<br>5<br>1 |                      |
| Endometrium, Hyperplasia, Cystic                     |                  |                  | 2                |                  |                  |                  | 2                |                  | 3                |                  |                  |                  |                  |                  |                  | 3                | 2                | 2                |                  |                  |                  | 2                | 2                | 1                     | 0<br>0<br>2<br>5<br>1 |                      |
| Lumen, Dilatation                                    |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                     | 0<br>0<br>2<br>5<br>1 |                      |
| Vagina   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                     | 0<br>0<br>2<br>5<br>1 |                      |
| Atrophy  |                  |                  | 4                |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Foreign Body   |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Hemorrhage   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Infiltration Cellular, Polymorphonuclear             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  | 3                |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Inflammation, Chronic Active                         |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |
| Epithelium, Degeneration                             | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 4                | 2                |                  | 3                |                  |                  |                  |                  |                  | 3                |                  |                  |                       | 0<br>0<br>2<br>5<br>1 |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
|  | 0<br>5<br>3<br>5      | 0<br>0<br>8<br>5      | 0<br>7<br>2<br>7      | 0<br>5<br>4<br>9      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>3<br>2<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>1<br>2      | 0<br>6<br>4<br>6      | 0<br>4<br>9<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>2<br>2<br>7      | 0<br>7<br>2<br>5      | 0<br>7<br>0<br>0      | 0<br>7<br>2<br>6      | 0<br>6<br>2<br>2      | 0<br>6<br>2<br>6      | 0<br>5<br>7<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      |                       |                      |
| ANIMAL ID  | 0<br>0<br>2<br>5<br>1 | 0<br>0<br>2<br>5<br>2 | 0<br>0<br>2<br>6<br>1 | 0<br>0<br>2<br>7<br>2 | 0<br>0<br>2<br>7<br>1 | 0<br>0<br>2<br>8<br>2 | 0<br>0<br>2<br>8<br>1 | 0<br>0<br>2<br>9<br>2 | 0<br>0<br>2<br>9<br>1 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>1<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>2<br>2 | 0<br>2<br>4<br>3<br>1 | 0<br>2<br>4<br>3<br>2 | 0<br>2<br>4<br>4<br>1 | 0<br>2<br>4<br>4<br>2 | 0<br>2<br>4<br>5<br>1 | 0<br>2<br>4<br>5<br>2 | 0<br>4<br>5<br>7<br>2 | 0<br>4<br>5<br>7<br>1 | 0<br>4<br>5<br>8<br>2 | 0<br>4<br>5<br>8<br>1 | 0<br>4<br>5<br>8<br>2 |                      |

|               |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|
| Pigmentation  | 2 | 3 | 2 | 1 | 4 | 2 | 2 | 4 | 4 | 1 | 3 | 3 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| Polyarteritis |   | 1 |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |  |  |  |

|            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy    | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Hemorrhage |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus       |   |   | 1 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 3 |   |   |   |   | 1 |
| Hyperplasia, Lobular | 1 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 3 |   |
| Alveolus, Dilatation | 1 | 3 | 2 | 2 |   |   |   | 3 | 2 | 2 |   |   |   |   | 2 | 2 |   |   |   |   | 2 |   |   |   |
| Duct, Dilatation     | 2 | 3 | 2 | 2 |   |   |   | 4 | 2 | 2 |   |   |   |   | 2 |   |   |   | 4 |   | 2 |   |   |   |

|                                    |   |  |  |  |  |  |  |   |  |  |  |  |   |   |   |  |  |   |  |  |  |  |   |  |  |
|------------------------------------|---|--|--|--|--|--|--|---|--|--|--|--|---|---|---|--|--|---|--|--|--|--|---|--|--|
| Skin                               | + |  |  |  |  |  |  | + |  |  |  |  |   | + | + |  |  | + |  |  |  |  | + |  |  |
| Inflammation, Suppurative          |   |  |  |  |  |  |  |   |  |  |  |  |   |   |   |  |  |   |  |  |  |  |   |  |  |
| Inflammation, Chronic Active       |   |  |  |  |  |  |  | 2 |  |  |  |  |   |   |   |  |  |   |  |  |  |  |   |  |  |
| Ulcer                              |   |  |  |  |  |  |  | 2 |  |  |  |  |   |   |   |  |  |   |  |  |  |  |   |  |  |
| Epithelium, Hyperplasia            |   |  |  |  |  |  |  | 3 |  |  |  |  |   |   |   |  |  |   |  |  |  |  |   |  |  |
| Epithelium, Foot, Hyperplasia      | 4 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  |   |  |  |  |  | 4 |  |  |
| Foot, Edema                        | 4 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  | 4 |  |  |  |  |   |  |  |
| Foot, Fibrosis                     | 4 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  | 4 |  |  |  |  | 4 |  |  |
| Foot, Inflammation, Chronic Active | 4 |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  | 4 |  |  |  |  | 4 |  |  |
| Foot, Necrosis                     |   |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  | 4 |  |  |  |  | 4 |  |  |
| Foot, Ulcer                        |   |  |  |  |  |  |  | 4 |  |  |  |  | 4 |   |   |  |  | 4 |  |  |  |  | 4 |  |  |

MUSCULOSKELETAL SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0 | females<br>(cont...) |
|--|-------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|----------------------|
| ANIMAL ID  | 0           | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |   |                      |
|  | 535         | 085 | 0727 | 0749 | 0728 | 0722 | 0352 | 0662 | 0662 | 0644 | 0731 | 0778 | 0725 | 0775 | 0770 | 0626 | 0622 | 0626 | 0626 | 0571 | 0728 | 0728 | 0728 |      |   |                      |
|  | 251         | 005 | 0061 | 0062 | 0071 | 0072 | 0081 | 0082 | 0091 | 0091 | 0241 | 0242 | 0244 | 0244 | 0243 | 0241 | 0241 | 0242 | 0241 | 0445 | 0447 | 0448 | 0449 | 0441 |   |                      |

Skeletal Muscle

**NERVOUS SYSTEM**

|   |   |   |   |   |   |   |   |     |     |   |
|---|---|---|---|---|---|---|---|-----|-----|---|
| Brain, Brain Stem<br>Compression<br>Hemorrhage<br>Polyarteritis | + | 1 | 4 | 4 | 2 | 3 | 4 | 4   | 1   |   |
| Brain, Cerebellum<br>Hemorrhage                                 | + |   |   |   |   |   |   |     |     |   |
| Brain, Cerebrum<br>Hemorrhage<br>Ventricle, Dilatation          | + |   | 1 | 2 |   | 2 | 2 |     |     |   |
| Nerve Trigeminal<br>Axon, Degeneration                          |   |   |   |   |   |   |   | + + | + + | 3 |
| Peripheral Nerve, Sciatic                                       |   |   |   |   |   |   |   | + + | + + | + |
| Peripheral Nerve, Tibial<br>Axon, Degeneration                  |   |   |   |   |   |   |   | + + | + + | + |
| Spinal Cord, Cervical<br>Mineralization                         |   |   |   |   |   |   |   | + + | + + | + |
| Spinal Cord, Lumbar<br>Axon, Degeneration                       |   |   |   |   |   |   |   | + + | + + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|  | 0535        | 0085 | 0072 | 0074 | 0072 | 0078 | 0032 | 0052 | 0062 | 0066 | 0044 | 0073 | 0077 | 0072 | 0082 | 0075 | 0077 | 0072 | 0000 | 0022 | 0062 | 0066 | 0057 | 0072 |           |                      | 0077 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0022                 |      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0022                 |      |
|  | 2           | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 5    | 5    | 5    | 5    | 5         | 0044                 |      |
|  | 5           | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 9    | 9    | 1    | 1    | 2    | 2    | 3    | 3    | 4    | 4    | 5    | 5    | 7    | 7    | 8    | 8    | 9         | 0055                 |      |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 0012                 |      |

Spinal Cord, Thoracic  
Mineralization

+ + + + +

**RESPIRATORY SYSTEM**

|   |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  |   |
|---|---|---|--|---|--|--|---|---|---|---|---|---|--|--|---|--|--|---|---|---|---|---|---|---|--|---|
| Lung  | + | + |  | + |  |  | + | + | + | + | + | + |  |  | + |  |  | + | + | + | + | + | + | + |  |   |
| Hemorrhage  |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  |   |
| Infiltration Cellular, Histiocyte                   |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  | 1 |
| Inflammation, Granulomatous                         |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  |   |
| Inflammation, Chronic                               |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  | 1 |
| Alveolar Epithelium, Hyperplasia                    |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  |   |
| Nose  | + | + |  | + |  |  | + | + | + | + | + | + |  |  | + |  |  | + |   | + | + | + |   |   |  |   |
| Hemorrhage  |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  |   |
| Inflammation, Suppurative                           |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  | 1 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |  |  |   |   |   |   |   |   |  |  |   |  |  |   |   |   |   |   |   |   |  | 2 |
| Trachea   | + | + |  | + |  |  | + | + | + | + | + | + |  |  | + |  |  | + |   | + | + | + |   |   |  |   |

**SPECIAL SENSES SYSTEM**

Zymbal's Gland +

**URINARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |   |
| Casts Protein                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | 2 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |
| Mineralization                           | 1 |   |   |   |   | 1 |   |   |   | 1 | 1 |   |   | 1 | 2 |   | 1 |   |   |   |   |   |   | 2 |  |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|  | 0535        | 0085 | 0077 | 0054 | 0072 | 0077 | 0033 | 0055 | 0066 | 0066 | 0044 | 0077 | 0077 | 0077 | 0022 | 0077 | 0077 | 0077 | 0066 | 0066 | 0055 | 0077 | 0077 | 0077 | 0066 |           |                      | 0066 |
| Nephropathy  | 1           | 4    | 4    | 1    | 1    |      |      |      | 1    | 2    |      | 2    | 1    | 1    | 2    |      | 1    | 1    | 1    | 2    | 2    | 1    |      | 2    | 2    |           |                      |      |
| Polyarteritis  |             | 4    | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |
| Cortex, Cyst   |             |      | X    |      |      |      |      |      |      |      | X    |      | X    | X    |      |      |      |      |      |      |      |      |      | X    |      |           |                      |      |
| Renal Tubule, Cyst                                   | X           |      |      |      |      | X    |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |           |                      |      |
| Transitional Epithelium, Hyperplasia                 | 1           |      |      |      |      | 1    |      | 1    |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |
| Urinary Bladder<br>Lumen, Dilatation                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|  | 0727        | 0715 | 0728 | 0748 | 0707 | 0766 | 0777 | 0777 | 0755 | 0755 | 0777 | 0766 | 0766 | 0755 | 0777 | 0777 | 0744 | 0755 | 0755 | 0777 |          | 0766 | 0766 |
| ANIMAL ID  | 04592       | 0446 | 0446 | 0446 | 0446 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0488 | 0488 | 0488 | 0488 | 0488 | 0488     | 0488 | 0488 |
| Pancreas   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    |
| Basophilic Focus                                     |             |      |      |      |      |      |      |      | X    |      |      |      | X    |      |      | X    |      |      |      |      |          |      |      |
| Infiltration Cellular, Lymphocyte                    | 2           | 3    | 2    |      |      | 3    | 1    | 1    |      | 1    | 1    | 1    | 4    | 1    | 1    |      | 1    |      | 1    | 2    | 1        | 2    | 2    |
| Inflammation, Chronic Active                         |             |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |
| Lipomatosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |
| Pigmentation   |             |      | 1    |      |      |      |      |      |      |      | 1    |      | 2    |      |      |      |      |      |      |      |          |      |      |
| Acinus, Degeneration                                 | 2           | 4    | 4    |      |      | 4    | 2    | 2    |      | 2    | 2    | 1    | 4    | 2    | 2    |      | 2    |      | 2    | 2    |          | 3    | 3    |
| Stomach, Forestomach                                 |             | +    |      | +    | +    | +    |      |      |      | +    | +    |      | +    | +    | +    |      |      | +    | +    | +    |          | +    | +    |
| Stomach, Glandular                                   |             | +    |      | +    | +    | +    |      |      |      | +    | +    |      | +    | +    | +    |      |      | +    | +    | +    |          | +    | +    |
| <b>CARDIOVASCULAR SYSTEM</b>                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |
| Blood Vessel   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    |
| Heart  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    |
| Cardiomyopathy                                       | 1           | 1    | 2    |      | 1    |      | 3    | 2    | 2    | 1    | 3    | 1    |      |      | 1    |      |      | 2    | 1    | 1    |          | 1    |      |
| <b>ENDOCRINE SYSTEM</b>                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |
| Adrenal Cortex                                       | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    |
| Accessory Adrenal Cortical Nodule                    |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |
| Angiectasis  |             |      | 3    |      |      |      |      |      | 4    |      | 2    |      |      |      |      |      | 2    |      | 2    |      | 2        |      |      |
| Degeneration, Cystic                                 | 3           | 2    | 3    |      |      | 3    | 4    | 4    |      | 2    | 3    |      |      | 4    |      | 2    |      | 2    | 2    | 4    |          | 1    |      |
| Hyperplasia  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |      |          |      |      |
| Hypertrophy  |             |      |      |      |      |      |      |      |      | 3    |      | 1    |      |      |      |      |      |      |      |      |          |      |      |
| Vacuolization Cytoplasmic                            |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |          | 2    |      |
| Adrenal Medulla                                      | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0727        | 0712  | 0708  | 0704  | 0700  | 0626  | 0622  | 0618  | 0614  | 0610  | 0606  | 0602  | 0528  | 0524  | 0520  | 0516  | 0512  | 0508  | 0504  | 0500  |          |
| ANIMAL ID  | 04592       | 04461 | 04422 | 04411 | 04402 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 | 04366 |          |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Hyperplasia                  |   |   |   | 1 |   |   |   |   | 1 |   |   |   | 2 |   |   |   |   |   |   |   | 7  | 1.4 |
| Hypertrophy                  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Islets, Pancreatic           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Parathyroid Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Hyperplasia                  |   |   | 2 |   |   | 2 |   |   |   | 3 |   |   | 2 |   |   |   | 1 |   |   |   | 6  | 1.8 |
| Pituitary Gland              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Angiectasis                  |   |   |   |   |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   | 4 |   | 8  | 4.0 |
| Pars Distalis, Cyst          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |
| Pars Distalis, Hyperplasia   |   | 4 |   |   | 4 | 2 |   | 3 | 4 | 3 |   | 2 |   | 4 |   |   | 3 | 4 |   | 1 | 4  | 4   |
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |     |
| Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |
| C-cell, Hyperplasia          | 2 |   | 1 |   | 1 |   |   | 1 | 3 | 1 | 2 |   |   | 1 |   |   |   | 3 | 1 |   | 17 | 1.4 |
| Follicular Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   | 3 | 3 | 2 |   |   |   |   | 3 | 3 |   | 6  | 2.7 |

**GENERAL BODY SYSTEM**

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|

**GENITAL SYSTEM**

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|
| Clitoral Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |     |
| Hyperkeratosis            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |     |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 3.5 |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3.2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|-----|
|  | 0727        | 0712  | 0708  | 0704  | 0607  | 0606  | 0607  | 0607  | 0505  | 0505  | 0706  | 0606  | 0505  | 0707  | 0707  | 0404  | 0505  | 0507  | 0606  | 0606  |          | 0505 |     |
| ANIMAL ID  | 04592       | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466    |      |     |
| Ovary  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 48   |     |
| Atrophy  | 2           | 2     | 2     |       | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 3     | 2     | 4     | 3     | 4     | 3     | 2        | 3    | 45  |
| Cyst   |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |          |      | 4   |
| Hyperplasia, Sertoliform                             |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       | 1        |      | 5   |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Bilateral, Cyst                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |          |      | 2   |
| Bursa, Cyst  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Follicle, Cyst                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 3   |
| Granulosa Cell, Hyperplasia                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 2   |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 3.0 |
| Oviduct  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +    | 48  |
| Uterus   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +    | 48  |
| Adenomyosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |      | 1   |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |      | 8   |
| Metaplasia, Squamous                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |          |      | 4   |
| Endometrial Glands, Hyperplasia                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Endometrium, Cyst                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Endometrium, Hyperplasia                             |             |       | 1     |       |       | 2     | 2     | 1     | 3     | 1     |       |       |       | 2     | 3     |       |       | 2     |       | 2     |          |      | 15  |
| Endometrium, Hyperplasia, Cystic                     | 2           |       | 2     |       | 2     |       |       |       |       |       | 2     | 2     | 1     |       |       | 3     | 2     |       | 3     |       | 3        | 2    | 20  |
| Lumen, Dilatation                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4    | 2   |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 4.0 |
| Vagina   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +    | 48  |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 2   |
| Foreign Body   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Infiltration Cellular, Polymorphonuclear             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 2   |
| Inflammation, Chronic Active                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 1   |
| Epithelium, Degeneration                             |             |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 6   |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      | 2.8 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|  | 0727        | 0715  | 0728  | 0718  | 0706  | 0706  | 0707  | 0707  | 0705  | 0705  | 0707  | 0706  | 0706  | 0705  | 0707  | 0707  | 0704  | 0705  | 0705  | 0707  |          | 0706  | 0706  |
| ANIMAL ID  | 04592       | 04461 | 04466 | 04466 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467 | 04467    | 04467 | 04467 |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     |

|                          |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------------|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Epithelium, Hyperplasia  |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
| Epithelium, Mucification | 4 | 4 | 4 |  | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 2 | 4 | 4  | 4   |
| Lumen, Dilatation        |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 3   |
|                          |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2   |
|                          |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 2.8 |
|                          |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 37 | 3.4 |
|                          |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 3.5 |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | +  |
| Hypocellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Myeloid Cell, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 48 | 48 |
| Lymph Node                                    |   | + |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   |   |   |   |   | +  | 9  |
| Axillary, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Iliac, Hyperplasia, Lymphoid                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Iliac, Infiltration Cellular, Plasma Cell     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 5  |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 4  |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Renal, Degeneration, Cystic                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Lymph Node, Mesenteric                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Spleen  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | +  |
| Bacterium                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Fibrosis                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Hematopoietic Cell Proliferation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Hyperplasia, Lymphoid                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Infiltration Cellular, Polymorphonuclear      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| Necrosis                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|
|  | 0727        | 0715  | 0728  | 0714  | 0706  | 0706  | 0707  | 0707  | 0705  | 0705  | 0707  | 0706  | 0706  | 0705  | 0707  | 0707  | 0704  | 0705  | 0705  | 0707  |          | 0706  | 0706  | 0705  |
| ANIMAL ID  | 04592       | 04461 | 04462 | 04461 | 04461 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04466 | 04468 | 04468 | 04468 | 04468 | 04468    | 04468 | 04468 | 04468 |
| Pigmentation   |             | 3     |       | 3     | 2     | 2     |       | 1     |       | 3     |       | 1     |       | 1     | 2     | 3     | 2     | 1     | 2     | 2     |          |       |       |       |
| Polyarteritis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |
| Thymus   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     |
| Atrophy  | 4           | 4     | 4     |       | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4        | 4     | 4     | 4     |
| Hemorrhage   |             |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus                     | 1 |   |   |   |   |   | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lobular               | 4 | 3 | 4 |   | 3 |   | 4 | 3 | 4 | 2 | 4 | 2 | 4 |   | 4 | 4 | 2 | 4 |   | 2 | 2 | 4 | 4 |   |
| Alveolus, Dilatation               |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |   |   | 2 |   |   |
| Duct, Dilatation                   |   |   |   |   | 2 |   |   |   |   | 2 |   |   | 2 |   |   |   | 2 |   | 2 |   |   |   | 3 |   |
| Skin                               | + |   |   |   |   |   | + | + |   |   |   |   |   |   | + | + |   |   |   |   |   | + |   |   |
| Inflammation, Suppurative          |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                              |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Foot, Hyperplasia      | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |
| Foot, Edema                        |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |
| Foot, Fibrosis                     | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |
| Foot, Inflammation, Chronic Active | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |
| Foot, Necrosis                     | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |
| Foot, Ulcer                        | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   |

MUSCULOSKELETAL SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                      |  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |  |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |  |
| F1 2.5 BPA F                         |  | 0<br>7<br>2<br>7      | 0<br>7<br>1<br>5      | 0<br>7<br>2<br>8      | 0<br>1<br>4<br>8      | 0<br>6<br>0<br>7      | 0<br>6<br>3<br>6      | 0<br>7<br>2<br>0      | 0<br>7<br>2<br>9      | 0<br>5<br>0<br>8      | 0<br>5<br>2<br>2      | 0<br>7<br>8<br>5      | 0<br>6<br>6<br>0      | 0<br>6<br>5<br>1      | 0<br>5<br>0<br>6      | 0<br>7<br>2<br>5      | 0<br>7<br>3<br>0      | 0<br>4<br>7<br>2      | 0<br>5<br>2<br>1      | 0<br>5<br>4<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>6<br>2<br>9      | 0<br>5<br>5<br>1      |                       |  |
|                                      |  | ANIMAL ID             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |  |
|                                      |  | 0<br>4<br>5<br>9<br>2 | 0<br>4<br>6<br>0<br>1 | 0<br>4<br>6<br>0<br>1 | 0<br>4<br>6<br>0<br>1 | 0<br>4<br>6<br>7<br>1 | 0<br>6<br>6<br>0<br>2 | 0<br>6<br>7<br>1<br>1 | 0<br>6<br>7<br>1<br>2 | 0<br>6<br>7<br>1<br>2 | 0<br>6<br>7<br>2<br>2 | 0<br>6<br>7<br>3<br>2 | 0<br>6<br>7<br>3<br>2 | 0<br>6<br>7<br>3<br>2 | 0<br>6<br>7<br>4<br>1 | 0<br>6<br>7<br>4<br>1 | 0<br>8<br>5<br>4<br>2 | 0<br>8<br>5<br>4<br>2 | 0<br>8<br>5<br>5<br>1 | 0<br>8<br>5<br>6<br>1 | 0<br>8<br>5<br>6<br>2 | 0<br>8<br>5<br>7<br>1 | 0<br>8<br>5<br>7<br>2 | 0<br>8<br>6<br>7<br>2 | 0<br>8<br>6<br>7<br>2 |  |
|                                      |  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | <b>* TOTALS</b>       |                       |                       |                       |  |

Skeletal Muscle

+

1

NERVOUS SYSTEM

|                           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |           |          |            |            |            |
|---------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----------|----------|------------|------------|------------|
| Brain, Brain Stem         | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>48</b> |          |            |            |            |
| Compression               | 3   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 2         | 1        | <b>13</b>  | <b>2.5</b> |            |
| Hemorrhage                | 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |           |          |            | <b>1</b>   | <b>4.0</b> |
| Polyarteritis             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |           |          |            | <b>1</b>   | <b>1.0</b> |
| Brain, Cerebellum         | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>48</b> |          |            |            |            |
| Hemorrhage                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |   |           | <b>1</b> | <b>2.0</b> |            |            |
| Brain, Cerebrum           | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>48</b> |          |            |            |            |
| Hemorrhage                | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |           |          |            | <b>1</b>   | <b>2.0</b> |
| Ventricle, Dilatation     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |           |          |            | <b>4</b>   | <b>1.8</b> |
| Nerve Trigeminal          | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>12</b> |          |            |            |            |
| Axon, Degeneration        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1         | <b>7</b> | <b>1.3</b> |            |            |
| Peripheral Nerve, Sciatic | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>12</b> |          |            |            |            |
| Peripheral Nerve, Tibial  | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>12</b> |          |            |            |            |
| Axon, Degeneration        | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 1 |           |          | <b>2</b>   | <b>1.0</b> |            |
| Spinal Cord, Cervical     | A + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>11</b> |          |            |            |            |
| Mineralization            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |   |           | <b>1</b> | <b>1.0</b> |            |            |
| Spinal Cord, Lumbar       | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | <b>12</b> |          |            |            |            |
| Axon, Degeneration        | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 1         | 1        | <b>8</b>   | <b>1.5</b> |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                 |       |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------------|-------|--|
| DAY ON TEST   | 7 | 7 | 7 | 1 | 6 | 6 | 7 | 7 | 5 | 5 | 7 | 6 | 6 | 5 | 7 | 7 | 4 | 5 | 5 | 7 | 6 | 6 | 5 | 5 | 5  |                 |       |  |
|   | 2 | 1 | 2 | 4 | 0 | 3 | 2 | 2 | 0 | 8 | 2 | 8 | 5 | 0 | 2 | 3 | 7 | 2 | 4 | 2 | 5 | 2 | 9 | 5 | 1  |                 |       |  |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE                | 7 | 5 | 8 | 8 | 7 | 6 | 9 | 8 | 2 | 5 | 0 | 1 | 6 | 5 | 0 | 0 | 2 | 1 | 1 | 7 | 1 | 1 | 1 | 1 | 1  |                 |       |  |
| F1 2.5 BPA F  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                 |       |  |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  |                 |       |  |
|   | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8  |                 |       |  |
|   | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5  |                 |       |  |
|   | 9 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7  |                 |       |  |
|   | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2  |                 |       |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | <b>* TOTALS</b> |       |  |
| Spinal Cord, Thoracic Mineralization                |   |   |   | A |   |   |   |   | + | + | + |   |   | + |   |   | + |   | + |   |   |   |   |   |    | 11              | 1 1.0 |  |
| <b>RESPIRATORY SYSTEM</b>                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                 |       |  |
| Lung  |   | + |   | + | + | + |   |   | + | + |   | + | + | + |   | + | + | + | + |   | + | + | + |   |    | 32              |       |  |
| Hemorrhage  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    | 1               | 4.0   |  |
| Infiltration Cellular, Histiocyte                   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    | 3               | 2.0   |  |
| Inflammation, Granulomatous                         |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               | 2.0   |  |
| Inflammation, Chronic                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               | 1.0   |  |
| Alveolar Epithelium, Hyperplasia                    |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    | 2               | 1.5   |  |
| Nose  |   | + |   | + | + | + |   |   | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   |   | 29 |                 |       |  |
| Hemorrhage  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               | 4.0   |  |
| Inflammation, Suppurative                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               | 1.0   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |   | 2 |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | 2 | 1 |   |    | 5               | 2.0   |  |
| Trachea   |   | + |   | + | + | + |   |   | + | + |   | + | + | + |   | + | + | + |   | + | + | + |   |   | 29 |                 |       |  |
| <b>SPECIAL SENSES SYSTEM</b>                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                 |       |  |
| Zymbal's Gland                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               |       |  |
| <b>URINARY SYSTEM</b>                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                 |       |  |
| Kidney  |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 48              |       |  |
| Casts Protein                                       |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |    | 4               | 1.3   |  |
| Infiltration Cellular, Polymorphonuclear            |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1               | 4.0   |  |
| Mineralization                                      |   | 1 | 1 |   |   | 1 | 1 | 1 | 1 |   | 1 | 1 |   | 1 | 2 | 1 |   | 1 | 1 | 1 |   | 1 |   |   |    | 23              | 1.1   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |     |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|-----|
|  | 0727        | 0758 | 0778 | 0718 | 0768 | 0776 | 0777 | 0755 | 0755 | 0776 | 0766 | 0766 | 0755 | 0777 | 0777 | 0744 | 0755 | 0755 | 0777 | 0766 |          | 0766 | 0755 |     |
| ANIMAL ID  | 0452        | 0446 | 0446 | 0446 | 0446 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0466 | 0488 | 0488 | 0488 | 0488 | 0488 | 0488 | 0488     | 0488 |      |     |
| Nephropathy  |             |      | 2    |      | 1    | 1    |      |      |      |      | 4    |      |      | 1    | 1    |      |      |      | 2    |      | 1        | 1    | 28   | 1.6 |
| Polyarteritis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 2    | 3.0 |
| Cortex, Cyst   |             |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      | X    |      |      |          | X    | 8    |     |
| Renal Tubule, Cyst                                   | X           |      |      |      |      | X    | X    |      |      |      |      |      | X    |      |      |      |      |      |      |      |          |      | 8    |     |
| Transitional Epithelium, Hyperplasia                 |             |      |      |      |      |      |      | 1    |      |      | 2    |      |      |      | 1    | 1    |      |      | 1    |      |          |      | 9    | 1.1 |
| Urinary Bladder                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1    |     |
| Lumen, Dilatation                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 4    | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females<br>(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|   | 1           | 6 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 4 | 5 | 6 | 5 | 5 | 7 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 5 |           |                      |
|   | 3           | 3 | 3 | 9 | 1 | 4 | 0 | 1 | 4 | 4 | 2 | 7 | 4 | 4 | 1 | 2 | 4 | 1 | 1 | 4 | 2 | 2 | 2 | 2 | 2 | 0         |                      |
|   | 9           | 2 | 5 | 4 | 6 | 5 | 8 | 5 | 2 | 2 | 5 | 2 | 0 | 0 | 5 | 8 | 7 | 1 | 0 | 2 | 7 | 7 | 8 | 8 | 9 | 0         |                      |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                      |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 0         |                      |
|   | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 4 |           |                      |
|   | 1           | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4 | 4 | 1 |           |                      |
|   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |           |                      |

**ALIMENTARY SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Large, Cecum           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Necrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Perforation                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Large, Colon           | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Intestine Small, Ileum           | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Foreign Body                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epithelium, Hyperplasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Intestine Small, Jejunum         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |  |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Necrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Epithelium, Hyperplasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Liver                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |  |
| Basophilic Focus                 |   | X |   | X | X |   |   |   |   | X | X |   |   | X |   |   |   |   | X |   |   | X |   |   |   |  |
| Clear Cell Focus                 |   |   |   | X |   |   | X | X |   |   |   | X | X | X |   |   |   |   |   |   |   | X |   |   |   |  |
| Degeneration, Cystic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |  |
| Fatty Change                     |   |   |   |   | 3 |   |   |   |   |   | 3 |   |   | 3 |   | 2 |   | 2 | 3 |   |   |   | 2 |   |   |  |
| Hematopoietic Cell Proliferation |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |  |
| Hepatodiaphragmatic Nodule       |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F                   | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|
|   | 0139        | 0163 | 0143 | 0159 | 0166 | 0165 | 0155 | 0155 | 0154 | 0154 | 0156 | 0155 | 0155 | 0157 | 0166 | 0166 | 0166 | 0165 | 0177 | 0177 |                      | 0177 | 0175 |
| ANIMAL ID   | 0041        | 0042 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0044 | 0044 | 0044                 | 0044 | 0044 |
| Infiltration Cellular, Mononuclear Cell<br>Inflammation, Chronic Active |             |      | 1    |      | 1    | 1    |      |      |      | 1    | 2    | 2    |      | 1    | 1    | 1    | 2    |      | 1    | 1    | 1                    | 1    | 1    |
| Mineralization  |             |      |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Mixed Cell Focus  |             |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Pigmentation  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Tension Lipidosis   |             |      |      |      | 2    |      |      |      |      |      | 4    |      |      |      |      |      | 4    |      |      |      |                      |      | 4    |
| Vacuolization Cytoplasmic   |             | 3    |      |      |      |      |      |      | 1    |      | 2    |      |      |      | 2    |      | 1    |      |      | 2    |                      |      | 2    |
| Bile Duct, Hyperplasia  |             |      | 1    |      |      | 1    |      |      |      |      | 3    |      |      |      | 1    | 1    |      |      |      |      |                      |      | 2    |
| Biliary Tract, Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      | 1    |
| Hepatocyte, Necrosis  | 1           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      | 3    |      |
| Oval Cell, Hyperplasia  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Mesentery   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Fat, Degeneration, Cystic   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Fat, Infiltration Cellular, Lymphocyte                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Fat, Inflammation, Chronic  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      | 4    |
| Fat, Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      | 4    |
| Pancreas  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    |
| Infiltration Cellular, Lymphocyte                                       |             |      | 1    | 2    | 2    |      |      | 1    | 2    |      | 2    |      |      | 1    |      | 1    | 1    | 1    | 1    | 2    |                      |      | 1    |
| Inflammation, Chronic Active  |             |      |      |      |      | 1    | 2    |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 3                    |      |      |
| Lipomatosis   |             |      |      | 3    |      |      |      |      |      | 2    |      |      |      |      |      |      | 3    |      |      |      |                      | 2    | 2    |
| Pigmentation  |             |      |      | 2    | 1    |      | 1    | 1    | 1    | 1    | 1    | 1    | 1    |      |      |      | 1    |      | 2    |      |                      |      | 1    |
| Acinus, Degeneration  |             |      | 2    | 3    | 3    | 1    | 2    |      | 2    |      | 3    |      | 2    | 2    | 1    | 3    | 1    | 1    | 1    | 3    |                      | 4    | 2    |
| Stomach, Forestomach  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    |
| Cyst Epithelial Inclusion   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Stomach, Glandular  | A           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|   | 0<br>1<br>3<br>9      | 0<br>6<br>3<br>2      | 0<br>4<br>3<br>5      | 0<br>5<br>9<br>4      | 0<br>6<br>1<br>6      | 0<br>6<br>4<br>5      | 0<br>5<br>0<br>8      | 0<br>5<br>1<br>5      | 0<br>5<br>4<br>2      | 0<br>4<br>4<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>7<br>4      | 0<br>5<br>4<br>0      | 0<br>5<br>1<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>4<br>7      | 0<br>6<br>1<br>1      | 0<br>5<br>4<br>2      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>2<br>9      |                       |           |                      |
|   | 0<br>0<br>4<br>1<br>1 | 0<br>0<br>4<br>1<br>2 | 0<br>0<br>4<br>2<br>1 | 0<br>0<br>4<br>3<br>2 | 0<br>0<br>4<br>3<br>1 | 0<br>0<br>4<br>4<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>0<br>4<br>5<br>2 | 0<br>0<br>4<br>5<br>1 | 0<br>2<br>5<br>7<br>2 | 0<br>2<br>5<br>7<br>1 | 0<br>2<br>5<br>8<br>2 | 0<br>2<br>5<br>8<br>2 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>6<br>9<br>2 | 0<br>2<br>6<br>0<br>1 | 0<br>2<br>6<br>1<br>2 | 0<br>2<br>6<br>1<br>1 | 0<br>4<br>7<br>3<br>1 | 0<br>4<br>7<br>3<br>2 | 0<br>4<br>7<br>4<br>1 | 0<br>4<br>7<br>4<br>2 | 0<br>4<br>7<br>4<br>1 | 0<br>5<br>7<br>4<br>1 |           |                      |

CARDIOVASCULAR SYSTEM

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy      |   | 3 |   |   | 1 | 1 |   |   | 1 |   | 1 | 1 |   |   | 1 | 1 |   |   | 2 | 1 | 1 |   |   |   |
| Metaplasia, Osseous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |

ENDOCRINE SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex            | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis               |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |
| Degeneration, Cystic      |   | 4 |   | 4 |   | 3 |   | 1 | 2 |   | 1 | 1 | 4 | 4 |   | 4 |   | 3 | 3 |   | 1 |   | 4 | 4 |
| Fibrosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Hyperplasia               |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hypertrophy               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Hyperplasia               |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hyperplasia               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Parathyroid Gland         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |   |
| Hyperplasia               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Pituitary Gland           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |      |   |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|---|
|   | 0139        | 0163 | 0143 | 0159 | 0164 | 0166 | 0155 | 0155 | 0155 | 0154 | 0155 | 0166 | 0155 | 0155 | 0177 | 0166 | 0166 | 0155 | 0177 | 0177 |                      | 0177 | 0177 | 0155 |   |
| ANIMAL ID   | 0041        | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0025 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0044 | 0044                 | 0044 | 0044 | 0044 |   |
| Pars Distalis, Cyst                                   |             |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    | X                    |      | X    |      |   |
| Pars Distalis, Hyperplasia                            |             |      |      | 4    | 3    |      |      | 3    | 4    | 3    |      | 4    |      | 4    | 4    | 3    | 3    |      | 4    | 2    | 4                    | 2    | 3    | 2    | 3 |
| Pars Distalis, Hypertrophy                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Pars Intermedia, Cyst                                 |             |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Thyroid Gland   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    | +    |   |
| Ultimobranchial Cyst                                  |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |                      |      |      |      |   |
| C-cell, Hyperplasia                                   |             | 2    |      |      | 2    | 3    | 2    | 1    |      |      |      |      |      | 1    |      |      | 1    |      | 2    | 1    |                      |      | 1    | 2    | 1 |
| Follicular Cell, Hyperplasia                          |             |      |      | 4    |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 3    |                      |      |      |      |   |
| <b>GENERAL BODY SYSTEM</b>                            |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| NONE  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| <b>GENITAL SYSTEM</b>                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Clitoral Gland  |             |      |      | +    | +    |      |      |      |      | +    |      | +    |      |      |      |      |      |      |      |      |                      |      |      |      | + |
| Hyperkeratosis  |             |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      | 4 |
| Inflammation, Suppurative                             |             |      |      | 2    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      | 4 |
| Duct, Dilatation                                      |             |      |      | 4    | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      | 4 |
| Ovary   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    | +    | + |
| Atrophy   |             | 2    | 4    | 2    | 2    | 4    | 3    | 2    | 2    |      | 3    | 2    | 2    | 4    | 2    | 3    | 2    | 2    | 2    | 2    | 3                    | 2    | 2    | 2    | 2 |
| Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Hyperplasia, Sertoliform                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Bilateral, Follicle, Cyst                             |             |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |
| Follicle, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |      |      |      |   |
| Oviduct   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    | +    | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 0<br>1<br>3<br>9      | 0<br>6<br>3<br>2      | 0<br>4<br>3<br>5      | 0<br>5<br>9<br>4      | 0<br>6<br>1<br>6      | 0<br>6<br>4<br>5      | 0<br>5<br>0<br>8      | 0<br>5<br>1<br>5      | 0<br>5<br>4<br>2      | 0<br>4<br>4<br>2      | 0<br>5<br>2<br>5      | 0<br>4<br>2<br>0      | 0<br>5<br>4<br>0      | 0<br>5<br>1<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>4<br>7      | 0<br>6<br>1<br>1      | 0<br>5<br>4<br>2      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>2<br>9      |                       |                       |
| ANIMAL ID   | 0<br>0<br>4<br>1<br>1 | 0<br>0<br>4<br>1<br>2 | 0<br>0<br>4<br>2<br>1 | 0<br>0<br>4<br>3<br>2 | 0<br>0<br>4<br>3<br>1 | 0<br>0<br>4<br>4<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>0<br>4<br>5<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>2<br>5<br>7<br>1 | 0<br>2<br>5<br>8<br>2 | 0<br>2<br>5<br>8<br>1 | 0<br>2<br>5<br>8<br>2 | 0<br>2<br>5<br>9<br>1 | 0<br>2<br>5<br>9<br>2 | 0<br>2<br>6<br>0<br>1 | 0<br>2<br>6<br>0<br>2 | 0<br>2<br>6<br>1<br>1 | 0<br>2<br>6<br>1<br>2 | 0<br>4<br>7<br>3<br>1 | 0<br>4<br>7<br>3<br>2 | 0<br>4<br>7<br>4<br>1 | 0<br>4<br>7<br>4<br>2 | 0<br>4<br>7<br>4<br>1 | 0<br>4<br>7<br>4<br>2 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uterus                                   | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                                  |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Hyperplasia, Stromal                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Squamous                     |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Endometrial Glands, Hyperplasia          |   |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Cyst                        |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia                 |   |   |   |   | 1 | 2 |   |   |   |   | 2 | 2 |   |   |   |   |   |   | 3 |   |   | 2 |   |   |
| Endometrium, Hyperplasia, Cystic         |   | 3 |   | 2 |   | 4 |   | 3 |   |   | 3 | 2 | 3 |   |   |   | 2 |   | 2 | 2 |   | 2 |   |   |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |
| Vagina                                   | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst, Squamous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2 | 2 |   |   |   | 4 |   |   | 3 |   |   |
| Epithelium, Degeneration                 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia                  |   |   | 3 |   |   |   |   | 2 |   |   |   | 1 | 3 |   |   |   |   |   | 3 |   |   |   |   |   |
| Epithelium, Mucification                 |   | 4 | 2 | 3 | 3 |   | 4 | 4 | 4 |   | 4 | 3 | 2 |   | 4 | 2 | 4 | 4 | 4 |   | 3 | 4 | 3 | 4 |

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Myeloid Cell, Hyperplasia                     |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                    |   |   |   |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                              |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 25.0 BPA F</b> | DAY ON TEST | 0<br>1<br>3<br>9      | 0<br>6<br>3<br>2      | 0<br>4<br>3<br>5      | 0<br>5<br>9<br>4      | 0<br>6<br>1<br>6      | 0<br>6<br>4<br>5      | 0<br>5<br>0<br>8      | 0<br>5<br>1<br>5      | 0<br>5<br>4<br>2      | 0<br>4<br>4<br>2      | 0<br>5<br>2<br>5      | 0<br>6<br>7<br>0      | 0<br>5<br>4<br>0      | 0<br>5<br>1<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>4<br>7      | 0<br>6<br>1<br>1      | 0<br>5<br>4<br>2      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>2<br>9      | <b>females<br/>(cont...)</b> |
|  | ANIMAL ID   | 0<br>0<br>4<br>1<br>1 | 0<br>0<br>4<br>1<br>2 | 0<br>0<br>4<br>2<br>1 | 0<br>0<br>4<br>3<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>0<br>4<br>4<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>0<br>4<br>5<br>2 | 0<br>0<br>4<br>5<br>1 | 0<br>2<br>4<br>7<br>2 | 0<br>2<br>5<br>8<br>1 | 0<br>2<br>5<br>7<br>2 | 0<br>2<br>5<br>8<br>2 | 0<br>2<br>5<br>7<br>2 | 0<br>2<br>5<br>6<br>1 | 0<br>2<br>5<br>5<br>2 | 0<br>2<br>6<br>6<br>1 | 0<br>2<br>6<br>6<br>1 | 0<br>2<br>6<br>6<br>1 | 0<br>4<br>7<br>3<br>2 | 0<br>4<br>7<br>3<br>1 | 0<br>4<br>7<br>3<br>4 | 0<br>4<br>7<br>4<br>1 |                              |

Renal, Infiltration Cellular, Plasma Cell

Lymph Node, Mandibular  
Degeneration, Cystic  
Infiltration Cellular, Plasma Cell

+

+

+

Lymph Node, Mesenteric  
Degeneration, Cystic  
Histiocytosis  
Infiltration Cellular, Plasma Cell

+

Spleen  
Hematopoietic Cell Proliferation  
Hyperplasia, Lymphoid  
Necrosis  
Pigmentation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   | 3 | 4 | 4 | 3 |   |   | 4 |   |   | 3 | 2 | 2 |   | 3 |   | 2 |   | 1 | 2 |   | 2 |   | 4 | 2 | 4 | 2 |
|   |   |   | 3 |   |   | 4 | 2 |   | 3 |   | 4 |   | 1 |   | 1 | 2 | 1 | 3 |   | 1 | 3 |   | 4 | 2 | 2 | 4 |

Thymus  
Atrophy

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |
|   | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 3 |   | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 |

**INTEGUMENTARY SYSTEM**

Mammary Gland  
Atypical Focus  
Hyperplasia, Lobular  
Alveolus, Dilatation  
Duct, Dilatation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   |   |   |   | 1 | 3 | 3 |   |   | 3 | 4 |   | 2 |   | 4 | 4 | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 2 |
|   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |

Skin  
Epithelium, Foot, Hyperplasia

|  |  |  |   |  |  |   |   |  |  |  |  |  |   |  |  |  |   |  |  |   |  |  |  |  |  |
|--|--|--|---|--|--|---|---|--|--|--|--|--|---|--|--|--|---|--|--|---|--|--|--|--|--|
|  |  |  | + |  |  | + | + |  |  |  |  |  | + |  |  |  | + |  |  | + |  |  |  |  |  |
|  |  |  |   |  |  | 4 | 4 |  |  |  |  |  | 4 |  |  |  |   |  |  | 3 |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|   | 0<br>1<br>3<br>9      | 0<br>6<br>3<br>2      | 0<br>4<br>3<br>5      | 0<br>5<br>9<br>4      | 0<br>6<br>1<br>6      | 0<br>6<br>4<br>5      | 0<br>5<br>0<br>8      | 0<br>5<br>1<br>5      | 0<br>5<br>4<br>2      | 0<br>4<br>4<br>2      | 0<br>5<br>2<br>5      | 0<br>4<br>2<br>0      | 0<br>5<br>4<br>0      | 0<br>5<br>1<br>5      | 0<br>7<br>2<br>8      | 0<br>6<br>4<br>7      | 0<br>6<br>1<br>1      | 0<br>6<br>4<br>0      | 0<br>5<br>2<br>2      | 0<br>7<br>2<br>7      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>2<br>9      |                       |           |                      |
|   | 0<br>0<br>4<br>1<br>1 | 0<br>0<br>4<br>1<br>2 | 0<br>0<br>4<br>2<br>1 | 0<br>0<br>4<br>3<br>2 | 0<br>0<br>4<br>3<br>1 | 0<br>0<br>4<br>4<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>0<br>4<br>4<br>2 | 0<br>0<br>4<br>4<br>1 | 0<br>2<br>4<br>5<br>7 | 0<br>2<br>4<br>5<br>8 | 0<br>2<br>4<br>5<br>1 | 0<br>2<br>4<br>5<br>2 | 0<br>2<br>5<br>5<br>9 | 0<br>2<br>5<br>6<br>0 | 0<br>2<br>6<br>6<br>1 | 0<br>2<br>6<br>6<br>1 | 0<br>2<br>6<br>6<br>1 | 0<br>2<br>6<br>6<br>1 | 0<br>4<br>7<br>3<br>2 | 0<br>4<br>7<br>3<br>1 | 0<br>4<br>7<br>3<br>4 | 0<br>4<br>7<br>4<br>1 | 0<br>4<br>7<br>4<br>2 |           |                      |

|                                    |  |  |  |  |  |  |  |  |   |   |  |  |  |  |   |  |  |  |  |  |  |  |   |   |  |
|------------------------------------|--|--|--|--|--|--|--|--|---|---|--|--|--|--|---|--|--|--|--|--|--|--|---|---|--|
| Foot, Bacterium                    |  |  |  |  |  |  |  |  | X | X |  |  |  |  |   |  |  |  |  |  |  |  |   |   |  |
| Foot, Edema                        |  |  |  |  |  |  |  |  |   | 4 |  |  |  |  |   |  |  |  |  |  |  |  |   | 4 |  |
| Foot, Fibrosis                     |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |   |  |
| Foot, Inflammation, Chronic Active |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |   |  |
| Foot, Necrosis                     |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |   |  |
| Foot, Ulcer                        |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  | 4 |   |  |

MUSCULOSKELETAL SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Diaphragm, Hernia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem<br>Compression       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   | 1 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum<br>Cyst                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ventricle, Dilatation                  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nerve Trigeminal<br>Axon, Degeneration |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
|  |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Peripheral Nerve, Sciatic              |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|   | 1           | 6 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 4 | 5 | 6 | 5 | 5 | 5 | 7 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7         | 5                    |
|   | 3           | 3 | 3 | 9 | 1 | 4 | 0 | 1 | 4 | 4 | 2 | 7 | 4 | 4 | 1 | 2 | 4 | 1 | 1 | 4 | 2 | 2 | 2 | 2         | 2                    |
|   | 9           | 2 | 5 | 4 | 6 | 5 | 8 | 5 | 2 | 2 | 5 | 2 | 0 | 0 | 5 | 8 | 7 | 1 | 0 | 2 | 7 | 7 | 8 | 8         | 9                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4         | 4                    |
|   | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7         | 7                    |
|   | 1           | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 | 4         | 5                    |
|   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2         | 1                    |

Peripheral Nerve, Tibial

+

+

Spinal Cord, Cervical

+

+

Spinal Cord, Lumbar  
Axon, Degeneration

+

+

1

Spinal Cord, Thoracic

+

+

**RESPIRATORY SYSTEM**

Lung

+ +

Foreign Body

X

X

Hemorrhage

4

Infiltration Cellular, Histiocyte

2

3

1

Inflammation, Granulomatous

3

2

Inflammation, Chronic

4

Necrosis

4

Alveolar Epithelium, Hyperplasia

Nose

+ + + + + + + + + + + + + + + + +

Inflammation, Suppurative

Olfactory Epithelium, Accumulation, Hyaline  
Droplet

3

2

3

Respiratory Epithelium, Hyperplasia, Goblet  
Cell

Trachea

+ + + + + + + + + + + + + + + + +

+

**SPECIAL SENSES SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females<br>(cont...) |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| DAY ON TEST   |  | 1 | 6 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 4 | 5 | 6 | 5 | 5 | 7 | 6 | 6 | 6 | 5 | 7 | 7 | 7 | 7 |                      |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F |  | 3 | 3 | 3 | 9 | 1 | 4 | 0 | 1 | 4 | 4 | 2 | 7 | 4 | 4 | 1 | 2 | 4 | 1 | 1 | 4 | 2 | 2 | 2 |                      |
| ANIMAL ID   |  | 9 | 2 | 5 | 4 | 6 | 5 | 8 | 5 | 2 | 2 | 5 | 2 | 0 | 0 | 5 | 8 | 7 | 1 | 0 | 2 | 7 | 7 | 8 |                      |
|   |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      |
|   |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 |                      |
|   |  | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |   |                      |
|   |  | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3 | 3 | 4 |   |                      |
|   |  | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |                      |

Eye +  
 Cataract 4  
 Retina, Degeneration 3

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accumulation, Hyaline Droplet        |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Casts Protein                        |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
| Mineralization                       | 1 |   | 1 | 1 | 1 | 2 | 2 | 1 | 2 |   |   |   | 2 | 1 | 1 |   | 1 |   |   | 1 |   |   | 1 |
| Nephropathy                          |   | 2 |   |   | 1 | 1 |   | 1 | 1 |   |   | 1 | 1 |   |   |   | 1 |   | 1 | 1 | 1 |   |   |
| Cortex, Cyst                         |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Cyst                   | X |   | X |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X | X |   |
| Transitional Epithelium, Hyperplasia |   |   |   |   |   | 1 |   |   | 2 |   |   |   |   |   |   |   |   | 1 |   |   | 1 |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                 |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST | 0500  | 0388  | 0506  | 0312  | 0722  | 0582  | 0774  | 0775  | 0679  | 0728  | 0749  | 0668  | 0410  | 0572  | 0728  | 0778  | 0778  | 0443  | 0622  |                 |
|   | ANIMAL ID   | 04752 | 04761 | 04762 | 04771 | 04772 | 04781 | 04782 | 04783 | 04784 | 04785 | 04786 | 04787 | 04788 | 04789 | 04790 | 04791 | 04792 | 04793 | 04794 | 04795           |
|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | <b>* TOTALS</b> |

ALIMENTARY SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |  |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--|
| Esophagus                        | + | + | + | + |   | + |   |   | + | + | + | + |   |   |   |   |   | + | + |   | <b>32</b>     |  |
| Intestine Large, Cecum           |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |  |
| Fibrosis                         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Inflammation, Chronic Active     |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Necrosis                         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Perforation                      |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Intestine Large, Colon           | + | + | + | + |   | + |   |   | + | + | + | + |   |   |   |   |   | + | + |   | <b>31</b>     |  |
| Intestine Small, Ileum           | + | + | + | + |   | + |   |   | + | + | + | + |   |   |   |   |   | + | + |   | <b>31</b>     |  |
| Foreign Body                     |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |  |
| Inflammation, Chronic Active     |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |  |
| Epithelium, Hyperplasia          |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Intestine Small, Jejunum         |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>      |  |
| Inflammation, Chronic Active     |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Necrosis                         |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |  |
| Epithelium, Hyperplasia          |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 3.0</b>  |  |
| Liver                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |  |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 1 |   |   | 3 |   |   | <b>5 2.2</b>  |  |
| Basophilic Focus                 | X |   |   |   |   | X |   | X |   |   |   |   | X | X |   |   | X | X |   |   | <b>15</b>     |  |
| Clear Cell Focus                 |   |   |   |   | X |   |   | X |   | X |   |   | X |   |   |   | X |   |   |   | <b>12</b>     |  |
| Degeneration, Cystic             | 1 |   |   |   | 1 | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   | <b>6 1.0</b>  |  |
| Fatty Change                     |   |   |   |   | 2 |   |   |   | 2 | 2 |   | 2 | 3 | 3 | 1 | 1 |   |   |   |   | <b>15 2.3</b> |  |
| Hematopoietic Cell Proliferation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.0</b>  |  |
| Hepatodiaphragmatic Nodule       |   |   |   |   |   | X |   | X |   | X |   |   |   |   |   |   |   |   | X |   | <b>6</b>      |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |    |     |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|----|-----|
|   | 050         | 038 | 050 | 030 | 072 | 058 | 072 | 076 | 067 | 077 | 046 | 061 | 049 | 052 | 078 | 078 | 077 | 074 | 068 | 062 |          |    |     |
| ANIMAL ID   | 047         | 044 | 044 | 044 | 044 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 088 | 088 | 088 | 088 | 088 | 088 |          |    |     |
| Infiltration Cellular, Mononuclear Cell               |             |     |     | 1   |     | 1   | 2   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 2   | 1   | 2   | 1   | 1        | 35 | 1.2 |
| Inflammation, Chronic Active                          |             |     |     | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 2  | 1.0 |
| Mineralization  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 1  | 1.0 |
| Mixed Cell Focus                                      |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 1  |     |
| Pigmentation  |             |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 1  | 2.0 |
| Tension Lipidosis                                     |             |     |     |     |     |     |     |     |     |     |     |     | 3   |     | 4   |     |     | 4   |     | 4   |          | 8  | 3.6 |
| Vacuolization Cytoplasmic                             | 1           | 2   |     |     |     |     |     | 1   |     |     |     |     |     |     |     |     | 2   | 2   | 1   |     |          | 14 | 1.7 |
| Bile Duct, Hyperplasia                                |             |     |     | 2   | 3   |     | 2   | 1   | 2   |     |     | 1   |     |     |     |     | 2   | 2   | 3   |     |          | 16 | 1.8 |
| Biliary Tract, Fibrosis                               |             |     |     | 1   |     |     | 1   |     |     |     |     | 1   |     |     |     |     |     |     | 2   |     |          | 4  | 1.3 |
| Hepatocyte, Necrosis                                  |             |     |     | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 3  | 1.7 |
| Oval Cell, Hyperplasia                                |             |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     |     |     |     |          | 1  | 1.0 |
| Mesentery   |             |     |     |     |     |     |     |     |     |     | +   |     |     |     |     |     | +   |     |     |     |          | 3  |     |
| Fat, Degeneration, Cystic                             |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 4   |     |     |     |          | 1  | 4.0 |
| Fat, Infiltration Cellular, Lymphocyte                |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 4   |     |     |     |          | 1  | 4.0 |
| Fat, Inflammation, Chronic                            |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 1  | 4.0 |
| Fat, Necrosis   |             |     |     |     |     |     |     |     |     | 4   |     |     |     |     |     |     |     |     |     |     |          | 2  | 4.0 |
| Pancreas  | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +        | 46 |     |
| Infiltration Cellular, Lymphocyte                     | 2           |     | 2   |     | 3   | 2   | 1   | 1   |     | 2   |     | 2   | 3   | 1   | 1   | 1   | 2   | 2   | 1   |     | 1        | 31 | 1.6 |
| Inflammation, Chronic Active                          |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 4  | 2.0 |
| Lipomatosis   |             |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     | 2   |     | 3   |          | 8  | 2.4 |
| Pigmentation  |             |     |     |     |     |     |     |     |     | 1   |     | 1   | 1   |     |     |     |     |     |     | 1   |          | 14 | 1.1 |
| Acinus, Degeneration                                  | 2           | 1   | 3   |     | 3   | 2   | 2   | 1   |     | 3   | 2   | 4   | 2   | 2   |     | 3   | 2   | 1   |     | 1   |          | 35 | 2.2 |
| Stomach, Forestomach                                  | +           | +   | +   | +   |     | +   | +   |     | +   |     |     | +   | +   | +   | +   |     |     |     |     | +   | +        | 34 |     |
| Cyst Epithelial Inclusion                             |             |     |     |     |     |     | X   |     |     |     |     |     |     |     |     |     |     |     |     |     |          | 1  |     |
| Stomach, Glandular                                    | +           | +   | +   | +   |     | +   |     |     | +   |     |     | +   | +   | +   | +   |     |     |     |     | +   | +        | 31 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST                                  |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |                  | 5 | 3 | 5 | 3 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 4 | 6 | 4 | 5 | 7 | 7 | 7 | 7 | 4 | 6 |
|  |                  | 5 | 8 | 0 | 1 | 2 | 8 | 2 | 2 | 7 | 2 | 2 | 6 | 1 | 9 | 5 | 2 | 2 | 2 | 2 | 8 | 8 |
| <b>F1 25.0 BPA F</b>                         |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | <b>ANIMAL ID</b> | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|  |                  | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
|  |                  | 5 | 6 | 6 | 7 | 7 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 0 |
|  |                  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                              |                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**CARDIOVASCULAR SYSTEM**

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Blood Vessel        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Heart               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Cardiomyopathy      | 1 |   | 1 |   | 2 | 1 | 1 | 1 |   |   | 1 |   |   |   | 1 | 2 | 1 | 2 | 1 |   | 2 | <b>24 1.3</b> |
| Metaplasia, Osseous |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |

**ENDOCRINE SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Adrenal Cortex            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>45</b>     |
| Angiectasis               | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 | <b>6 2.2</b>  |
| Degeneration, Cystic      | 2 | 1 |   |   | 3 | 4 |   |   |   | 2 | 4 | 2 |   |   |   | 4 | 4 | 4 | 1 |   | 2 | <b>27 2.8</b> |
| Fibrosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Hyperplasia               |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.5</b>  |
| Hypertrophy               | 3 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.0</b>  |
| Vacuolization Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Adrenal Medulla           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>      |
| Hyperplasia               |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | <b>3 1.7</b>  |
| Islets, Pancreatic        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Hyperplasia               | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 2.0</b>  |
| Parathyroid Gland         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>45</b>     |
| Hyperplasia               |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 1 |   | <b>3 1.7</b>  |
| Pituitary Gland           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Angiectasis               |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   | <b>4 4.0</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|   | 050         | 038 | 050 | 030 | 072 | 058 | 072 | 076 | 067 | 077 | 046 | 061 | 049 | 052 | 078 | 078 | 072 | 072 | 048 | 062 |          |
| ANIMAL ID   | 047         | 047 | 047 | 047 | 047 | 068 | 068 | 068 | 068 | 068 | 068 | 068 | 068 | 068 | 088 | 088 | 088 | 088 | 088 | 088 |          |
|   | 5           | 8   | 8   | 0   | 1   | 2   | 8   | 2   | 2   | 7   | 2   | 2   | 6   | 1   | 9   | 5   | 2   | 2   | 8   | 8   |          |
|   | 0           | 8   | 8   | 6   | 0   | 7   | 2   | 4   | 5   | 9   | 8   | 8   | 9   | 8   | 0   | 2   | 8   | 8   | 8   | 2   |          |
|   | 0           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |          |
|   | 4           | 4   | 4   | 4   | 4   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 8   | 8   | 8   | 8   | 8   | 8   |          |
|   | 7           | 7   | 7   | 7   | 7   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 8   | 6   | 6   | 6   | 6   | 7   | 7   |          |
|   | 5           | 6   | 6   | 7   | 7   | 4   | 4   | 5   | 5   | 6   | 6   | 7   | 7   | 8   | 8   | 9   | 9   | 0   | 0   | 0   |          |
|   | 2           | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 2   |          |

|                            |   |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |  |   |   |  |    |     |
|----------------------------|---|---|---|---|---|---|--|--|---|---|--|---|---|---|---|---|--|---|---|--|----|-----|
| Pars Distalis, Cyst        |   |   |   |   |   |   |  |  |   | X |  |   |   |   |   | X |  | X |   |  | 7  |     |
| Pars Distalis, Hyperplasia | 4 | 3 | 4 | 2 | 3 | 4 |  |  | 3 | 4 |  | 4 | 4 | 3 | 4 | 4 |  | 4 | 3 |  | 32 | 3.4 |
| Pars Distalis, Hypertrophy |   |   |   |   |   |   |  |  |   |   |  |   |   |   |   | 2 |  |   |   |  | 1  | 2.0 |
| Pars Intermedia, Cyst      |   |   |   |   |   |   |  |  |   |   |  |   |   |   |   |   |  |   |   |  | 1  |     |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |
| Ultimobranchial Cyst         |   | X |   |   |   | X |   |   |   |   |   |   | X |   |   |   | X |   |   |   | 6  |     |
| C-cell, Hyperplasia          | 2 | 1 |   |   |   |   | 1 | 1 |   | 3 | 1 | 1 |   |   | 1 |   |   |   | 2 | 1 | 22 | 1.5 |
| Follicular Cell, Hyperplasia |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 2.8 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |   |     |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|---|-----|
| Clitoral Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  | 6 |     |
| Hyperkeratosis            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  | 2 | 4.0 |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  | 3 | 3.3 |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  | 4 | 4.0 |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Ovary                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |     |
| Atrophy                   | 4 | 2 | 2 | 1 | 2 | 4 | 2 | 3 | 2 | 3 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 2 | 2 | 3 | 4  | 44  | 2.6 |
| Cyst                      |   |   |   | X |   |   |   |   |   | X | X |   |   |   |   |   | X |   |   |   | 4  |     |     |
| Hyperplasia, Sertoliform  | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |     |
| Bilateral, Follicle, Cyst |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |     |
| Follicle, Cyst            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 2  |     |     |

|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|   | 050         | 038 | 050 | 030 | 072 | 058 | 072 | 076 | 067 | 077 | 046 | 061 | 049 | 052 | 078 | 072 | 077 | 048 | 063 | 062 |          |
| ANIMAL ID   | 047         | 047 | 047 | 047 | 047 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 088 | 088 | 088 | 088 | 088 | 088 |          |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |     |
| Atrophy                          |   |   |   |   | 3 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 4  | 2.8 |
| Hyperplasia, Stromal             |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Metaplasia, Squamous             | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   | 4  | 2.3 |
| Endometrial Glands, Hyperplasia  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |
| Endometrium, Cyst                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Endometrium, Hyperplasia         |   |   |   | 2 |   |   | 2 | 2 |   |   |   |   |   |   |   | 1 |   |   | 3 |   | 12 | 2.0 |
| Endometrium, Hyperplasia, Cystic | 4 | 3 | 2 |   |   | 2 |   |   | 2 | 2 | 2 | 2 | 3 |   | 2 | 3 |   | 2 | 2 | 4 | 26 | 2.5 |
| Lumen, Dilatation                |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 4 | 3  | 4.0 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Vagina                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |     |
| Cyst, Squamous                           |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Infiltration Cellular, Polymorphonuclear |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 2 |   |   | 2 | 9  | 2.7 |
| Epithelium, Degeneration                 |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 3 |   |   |   |   |   |   | 3  | 2.7 |
| Epithelium, Hyperplasia                  | 3 |   |   |   |   | 2 |   |   |   |   | 2 | 3 |   |   | 4 | 4 |   |   |   | 3 | 12 | 2.8 |
| Epithelium, Mucification                 |   | 4 | 3 | 2 | 2 |   | 4 | 4 | 3 | 3 | 4 |   | 3 |   |   |   | 2 | 4 | 2 | 3 | 34 | 3.3 |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |
| Hypocellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1  | 4.0 |
| Myeloid Cell, Hyperplasia                     |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 4.0 |
| Lymph Node                                    |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   | 6  |     |
| Axillary, Hyperplasia, Lymphoid               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 1  | 4.0 |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 | 4 |   |   |   |   | 3  | 4.0 |
| Popliteal, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 1  | 3.0 |
| Popliteal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 1  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|   | 050         | 038 | 050 | 031 | 072 | 058 | 072 | 076 | 067 | 077 | 046 | 061 | 049 | 052 | 078 | 077 | 072 | 072 | 048 | 062 |          |
| ANIMAL ID   | 047         | 047 | 047 | 047 | 047 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 066 | 088 | 088 | 088 | 088 | 088 | 088 |          |
|   | 2           | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 2   | 1   | 46       |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                                    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|------------------------------------|
| Renal, Infiltration Cellular, Plasma Cell   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0                                |
| Lymph Node, Mandibular<br>Degeneration, Cystic<br>Infiltration Cellular, Plasma Cell                  | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1 4.0<br>3 4.0                     |
| Lymph Node, Mesenteric<br>Degeneration, Cystic<br>Histiocytosis<br>Infiltration Cellular, Plasma Cell | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1 4.0<br>1 4.0<br>1 4.0            |
| Spleen<br>Hematopoietic Cell Proliferation<br>Hyperplasia, Lymphoid<br>Necrosis<br>Pigmentation       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | 29 2.4<br>2 3.5<br>1 4.0<br>28 2.5 |
| Thymus<br>Atrophy   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | 43 3.8                             |

**INTEGUMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                                   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------------------------------|
| Mammary Gland<br>Atypical Focus<br>Hyperplasia, Lobular<br>Alveolus, Dilatation<br>Duct, Dilatation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 | 1 2.0<br>30 3.1<br>5 2.0<br>7 2.1 |
| Skin<br>Epithelium, Foot, Hyperplasia   | + | + |   |   |   |   |   | + | + | + | + | + | + | + | + |   |   |   |   |   | 14 | 12 3.9                            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|                                      |  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|--------------------------------------|--|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST                          |  | 5               | 3 | 5 | 3 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 4 | 6 | 4 | 5 | 7 | 7 | 7 | 7 | 4 | 6 |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |  | 5               | 8 | 0 | 1 | 2 | 8 | 2 | 2 | 7 | 2 | 2 | 6 | 1 | 9 | 5 | 2 | 2 | 2 | 2 | 8 | 2 |
| F1 25.0 BPA F                        |  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                            |  | 4               | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
|                                      |  | 7               | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 7 | 7 | 7 |
|                                      |  | 5               | 6 | 6 | 7 | 7 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 0 |
|                                      |  | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|                                      |  | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                    |   |  |   |  |  |  |  |  |  |   |  |   |  |   |  |   |  |   |  |  |   |  |        |
|------------------------------------|---|--|---|--|--|--|--|--|--|---|--|---|--|---|--|---|--|---|--|--|---|--|--------|
| Foot, Bacterium                    |   |  |   |  |  |  |  |  |  |   |  |   |  |   |  |   |  |   |  |  |   |  | 2      |
| Foot, Edema                        | 4 |  | 4 |  |  |  |  |  |  | 4 |  | 4 |  |   |  | 4 |  |   |  |  | 3 |  | 8 3.9  |
| Foot, Fibrosis                     | 4 |  | 4 |  |  |  |  |  |  | 4 |  | 4 |  | 4 |  | 4 |  | 4 |  |  |   |  | 12 4.0 |
| Foot, Inflammation, Chronic Active | 4 |  | 4 |  |  |  |  |  |  | 4 |  | 4 |  | 3 |  | 4 |  | 4 |  |  |   |  | 12 3.9 |
| Foot, Necrosis                     | 4 |  | 4 |  |  |  |  |  |  | 4 |  | 4 |  |   |  | 4 |  | 4 |  |  |   |  | 10 4.0 |
| Foot, Ulcer                        | 4 |  | 4 |  |  |  |  |  |  | 4 |  | 4 |  | 3 |  | 4 |  | 4 |  |  |   |  | 11 3.9 |

MUSCULOSKELETAL SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Skeletal Muscle   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Diaphragm, Hernia |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

NERVOUS SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |       |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46    |       |
| Compression               |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   | 3 1   | 7 1.6 |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46    |       |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46    |       |
| Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1     |       |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 1.5 |       |
| Nerve Trigeminal          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |       |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.0 |       |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2     |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|   | ANIMAL ID   | 5 | 3 | 5 | 3 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 4 | 6 | 4 | 5 | 7 | 7 | 7 | 7 |          |
|   |             | 5 | 8 | 0 | 1 | 2 | 8 | 2 | 2 | 7 | 2 | 2 | 6 | 1 | 9 | 5 | 2 | 2 | 2 | 2 |          |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|   |             | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 |          |
|   |             | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 7 |          |
|   |             | 5 | 6 | 6 | 7 | 7 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 |          |
|   |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |          |

Peripheral Nerve, Tibial

2

Spinal Cord, Cervical

2

Spinal Cord, Lumbar  
Axon, Degeneration

2

1 1.0

Spinal Cord, Thoracic

2

**RESPIRATORY SYSTEM**

Lung

+ + + + + + + + + + + + + + + +

34

Foreign Body

2

Hemorrhage

1 4.0

Infiltration Cellular, Histiocyte

2 4 3 2 1

8 2.3

Inflammation, Granulomatous

2 2.5

Inflammation, Chronic

1 4.0

Necrosis

1 4.0

Alveolar Epithelium, Hyperplasia

2 1 2.0

Nose

+ + + + + + + + + + + + + + + +

32

Inflammation, Suppurative

1

1 1.0

Olfactory Epithelium, Accumulation, Hyaline Droplet

2 2

6 2.2

Respiratory Epithelium, Hyperplasia, Goblet Cell

2

1 2.0

Trachea

+ + + + + + + + + + + + + + + +

32

**SPECIAL SENSES SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 BPA F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |
|   | 5           | 3 | 5 | 3 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 4 | 6 | 4 | 5 | 7 | 7 | 7 | 4 | 6               |
|   | 5           | 8 | 0 | 1 | 2 | 8 | 2 | 2 | 7 | 2 | 2 | 6 | 1 | 9 | 5 | 2 | 2 | 2 | 8 | 8               |
|   | 0           | 8 | 6 | 0 | 7 | 2 | 4 | 5 | 9 | 8 | 8 | 9 | 8 | 0 | 2 | 8 | 8 | 8 | 3 | 2               |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |
|   | 4           | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8               |
|   | 7           | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 7 | 7               |
|   | 5           | 6 | 6 | 7 | 7 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 0               |
|   | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2               |
|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |

|                      |   |       |
|----------------------|---|-------|
| Eye                  | 1 |       |
| Cataract             |   | 1 4.0 |
| Retina, Degeneration |   | 1 3.0 |

URINARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |        |
| Accumulation, Hyaline Droplet        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Casts Protein                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.0  |
| Mineralization                       | 1 | 1 | 2 |   | 2 | 1 |   |   |   | 2 | 1 |   | 1 |   |   | 1 |   | 1 |   |   |    | 25 1.3 |
| Nephropathy                          |   |   | 3 |   | 2 | 1 | 1 |   | 1 |   | 1 |   | 1 | 1 |   | 1 |   |   |   |   | 4  | 21 1.3 |
| Cortex, Cyst                         |   |   | X |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 5      |
| Renal Tubule, Cyst                   |   |   | X |   | X |   | X |   | X |   | X |   |   |   |   | X |   |   |   |   |    | 12     |
| Transitional Epithelium, Hyperplasia | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 7 1.3  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST | 0599  | 0477  | 0722  | 0588  | 0677  | 0777  | 0777  | 0555  | 0555  | 0444  | 0666  | 0777  | 0666  | 0666  | 0555  | 0555  | 0777  | 0666  | 0333  | 0777  | 0666  | 0666  | 0777  | females<br>(cont...) |
|   | ANIMAL ID   | 00572 | 00581 | 00592 | 00591 | 00602 | 00601 | 00602 | 00611 | 00612 | 00621 | 00622 | 00623 | 00624 | 00625 | 00626 | 00627 | 00628 | 00629 | 00644 | 00648 | 00649 | 00690 | 00691 |                      |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + |   | + | + |   | + |   | + | + | + | + |   | + | + | + | + |   | + | + |   | + | + |   |
| Intestine Large, Colon                  | + | A |   | + | + |   | + |   | + | + | + | + |   | + | A | + | + | + |   | + | + |   | + | + |
| Intestine Small, Ileum                  | + | A |   | + | + |   | + |   | + | + | + | + |   | + | A | + | + | + |   | + | + |   | + | + |
| Intestine Small, Jejunum                | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   |   |   |   | 2 | 4 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                        |   | X |   |   | X |   |   | X |   |   | X | X |   | X |   |   |   |   | X | X | X |   |   |   |
| Clear Cell Focus                        |   |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   | X |   | X | X | X |   |   |
| Degeneration, Cystic                    |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Fatty Change                            |   |   |   |   | 3 | 2 | 2 |   |   |   |   | 4 | 2 |   |   |   |   | 2 |   |   |   |   |   | 3 |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell |   |   | 1 |   | 1 | 1 | 1 |   | 2 |   | 1 |   | 1 | 1 |   | 1 | 2 | 1 |   | 1 | 1 | 1 | 1 | 1 |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Mitotic Alteration                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Tension Lipidosis                       |   |   |   |   | 4 | 2 |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   | 2 |
| Vacuolization Cytoplasmic               |   |   | 1 |   | 2 |   |   |   | 1 |   |   |   | 1 |   | 1 |   |   | 1 |   |   |   | 3 |   |   |
| Bile Duct, Hyperplasia                  | 1 |   | 3 |   | 2 |   | 2 |   |   |   |   | 2 |   | 1 | 3 | 1 |   |   |   | 2 |   | 2 | 1 |   |
| Biliary Tract, Fibrosis                 | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   | 1 |   |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|
|   | 0599        | 0477  | 0727  | 0588  | 0677  | 0777  | 0777  | 0777  | 0555  | 0555  | 0444  | 0666  | 0777  | 0666  | 0666  | 0555  | 0555  | 0777  | 0666  | 0376  |                      | 0766  | 0666  | 0666  |
| ANIMAL ID   | 00572       | 00058 | 00058 | 00059 | 00069 | 00066 | 00066 | 00066 | 00066 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00077 | 00088 | 00088                | 00099 | 00099 | 00099 |

Oval Cell, Hyperplasia

1

Mesentery  
Fat, Necrosis

+

4

Pancreas  
Basophilic Focus  
Infiltration Cellular, Lymphocyte  
Inflammation, Chronic Active  
Lipomatosis  
Pigmentation  
Acinar Cell, Hyperplasia  
Acinus, Degeneration

+ + + + + + + + + + + + + + + + + X + + + + + +  
 1 2 1 1 2 2 1 1 1 1 2 1 2 1 3 2 1  
 2 2 3 1 2 4 2 2 2 2 3 2 1 1 1 1 2 1

Stomach, Forestomach  
Inflammation, Chronic Active  
Ulcer

+  
 4 4

Stomach, Glandular  
Mineralization

+ A +

CARDIOVASCULAR SYSTEM

Blood Vessel  
Mineralization

+ +

Heart  
Cardiomyopathy  
Mineralization

+  
 1 1 1 2 1 2 1 1 1 1 2 1 1 2 1 1 1 1 1 2 1 1 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST | 0599  | 0477  | 0758  | 0667  | 0777  | 0777  | 0777  | 0555  | 0555  | 0467  | 0676  | 0666  | 0666  | 0555  | 0555  | 0777  | 0666  | 0376  | 0766  | 0066  | 0067  | 0067  | females<br>(cont...) |
|   | ANIMAL ID   | 00572 | 00588 | 00559 | 00559 | 00660 | 00666 | 00666 | 00666 | 00221 | 00222 | 00222 | 00222 | 00222 | 00222 | 00222 | 00222 | 00222 | 00448 | 00448 | 00449 | 00449 | 00449 |                      |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 |   |   |   |   | 2 |   |   |   |   |   |
| Degeneration, Cystic Fibrosis     | 4 |   | 4 | 2 | 4 | 1 | 4 | 4 | 4 | 4 |   | 4 | 4 |   |   |   | 2 | 2 |   |   | 2 |   | 4 |
| Hyperplasia                       |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 |   |   |
| Metaplasia, Osseous               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                      |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic         |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       | 1 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                       | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                       | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |   | 4 |   |   |   |
| Pars Distalis, Cyst               |   |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Pars Distalis, Hyperplasia        |   | 2 |   | 4 |   |   | 2 | 4 | 3 |   | 2 |   |   |   |   | 4 |   | 1 |   | 3 |   | 3 | 2 |
| Pars Distalis, Hypertrophy        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Intermedia, Cyst             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Rathke's Cleft, Cyst              |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| DAY ON TEST   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | 9 | 9 | 7 | 2 | 8 | 8 | 2 | 0 | 2 | 8 | 1 | 7 | 4 | 2 | 3 | 3 | 1 | 9 | 6 | 2 | 7 | 8 | 7 | 8 | 7 | 6 | 6 | 0 | 2 | 7 | 7 | 0 | 3 | 2 | 5 |   |
| ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |
|   | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |
|   | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |   |
|   | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |

females  
(cont...)

|                                   |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |     |  |   |  |  |   |  |   |  |   |  |  |  |
|-----------------------------------|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|-----|--|---|--|--|---|--|---|--|---|--|--|--|
| Infiltration Cellular, Lymphocyte | 1 |  |  |  |  |  |  |  |  |  |   |  |  |  |  |     |  |   |  |  |   |  |   |  |   |  |  |  |
| Ultimobranchial Cyst              | X |  |  |  |  |  |  |  |  |  | X |  |  |  |  | 1 1 |  |   |  |  | 2 |  | 2 |  | 1 |  |  |  |
| C-cell, Hyperplasia               | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  | 1   |  | 2 |  |  |   |  | 2 |  | 1 |  |  |  |
| Follicular Cell, Hyperplasia      | 1 |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  | 1   |  | 2 |  |  |   |  | 2 |  | 1 |  |  |  |

**GENERAL BODY SYSTEM**

Tissue NOS  
Metaplasia, Osseous

**GENITAL SYSTEM**

Clitoral Gland  
Hyperkeratosis  
Inflammation, Suppurative  
Duct, Dilatation

+  
4  
4

Fat Pad, Ovarian/parametrial  
Necrosis

+  
4

Ovary  
Atrophy  
Cyst  
Hyperplasia, Sertoliform  
Pigmentation  
Bilateral, Follicle, Cyst  
Bursa, Cyst  
Follicle, Cyst  
Granulosa Cell, Hyperplasia

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Atrophy                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Cyst                        | 4 | 4 | 3 | 2 | 4 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 3 | 2 | 2 | 4 | 4 | 3 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Hyperplasia, Sertoliform    | 1 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                | 1 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Follicle, Cyst   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bursa, Cyst                 | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst              | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Granulosa Cell, Hyperplasia | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|   | 0599        | 0479 | 0727 | 0583 | 0687 | 0772 | 0770 | 0722 | 0584 | 0554 | 0465 | 0745 | 0663 | 0665 | 0596 | 0556 | 0727 | 0668 | 0378 | 0727 |           |                      | 0660 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oviduct                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + |
| Uterus                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                                  | 4 |   | 3 | 2 |   |   |   |   |   |   |   |   | 3 |   |   |   | 4 |   |   |   |   |   |   |   |
| Metaplasia, Squamous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Cyst                        |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia                 |   |   | 2 |   |   | 1 | 1 | 1 | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 2 | 2 |
| Endometrium, Hyperplasia, Cystic         |   |   |   |   | 1 |   |   |   |   |   | 3 | 2 | 3 |   | 2 |   | 2 |   | 2 | 3 | 2 | 3 | 4 |   |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 |   |   |   | 4 |   |   |   |   |   |   |
| Vagina                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                                  | 4 |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 2 |   |   |   |   | 2 |
| Epithelium, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | 3 |   |   |
| Epithelium, Hyperplasia                  |   |   | 3 |   |   | 2 |   |   |   |   | 3 |   |   |   |   |   | 2 | 3 |   | 2 |   |   |   |   |
| Epithelium, Mucification                 |   |   |   |   | 4 | 2 | 4 | 4 | 4 | 3 | 2 | 4 | 4 | 3 | 4 | 4 | 3 |   | 2 | 3 | 4 | 4 |   | 4 |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |
| Myeloid Cell, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                   | + |   |   |   |   | + |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                 |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                |   |   |   |   |   | 3 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Degeneration, Cystic             | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|-------|
|   | 0599        | 0477  | 0728  | 0588  | 0672  | 0770  | 0772  | 0777  | 0582  | 0551  | 0474  | 0662  | 0773  | 0663  | 0665  | 0591  | 0556  | 0722  | 0668  | 0377  |                      | 0662  | 0663  | 0700  | 0662  | 0702  |
| ANIMAL ID   | 00572       | 00581 | 00582 | 00591 | 00602 | 00601 | 00606 | 00606 | 00606 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607 | 00607                | 00607 | 00607 | 00607 | 00607 | 00607 |

Pancreatic, Hyperplasia, Lymphoid  
Renal, Degeneration, Cystic  
Renal, Infiltration Cellular, Plasma Cell

4

Lymph Node, Mandibular  
Degeneration, Cystic  
Infiltration Cellular, Plasma Cell

+  
4  
4

Spleen  
Hematopoietic Cell Proliferation  
Hyperplasia, Lymphoid  
Pigmentation

+  
3 3 3 2 2 2 2 4 1 2 1 2 1 4 1 1 3 2 2 2 3 4 1  
3  
2 1 2 2 2 1 3 2 1 4 1 1 3 2 2 2 3 4 1

Thymus  
Atrophy  
Cyst  
Epithelial Cell, Hyperplasia

+  
4 3 4 4 4 4 4 4 4 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4  
X  
4

INTEGUMENTARY SYSTEM

Mammary Gland  
Atypical Focus  
Hyperplasia, Lobular  
Inflammation, Chronic  
Alveolus, Dilatation  
Duct, Dilatation

+  
2  
3 4 2 3 4 2 3 2 2 3 4 3 4 2 4 4 3 3 3 4  
2 2 2 2 2 2 2 2 2 2 2 2 2 2  
2 3 2 2 2 2 2 2 2 2 2 2 2 2

Skin  
Cyst Epithelial Inclusion  
Inflammation, Suppurative

+  
X  
2 X

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                      |  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |      |      |      |      |
|--------------------------------------|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|------|------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |  | 0599        | 0472 | 0758 | 0688 | 0720 | 0772 | 0777 | 0777 | 0558 | 0555 | 0446 | 0772 | 0663 | 0666 | 0666 | 0555 | 0555 | 0772 | 0666 | 0337 |                      | 0776 | 0666 | 0667 | 0772 | 0666 | 0772 |
| F1 250.0BPA F                        |  | 0057        | 0058 | 0058 | 0059 | 0060 | 0061 | 0066 | 0066 | 0066 | 0073 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0448 |                      | 0448 | 0449 | 0449 | 0449 | 0449 | 0449 |
| ANIMAL ID                            |  | 0572        | 0481 | 0782 | 0681 | 0721 | 0771 | 0771 | 0551 | 0551 | 0442 | 0772 | 0662 | 0662 | 0662 | 0552 | 0552 | 0772 | 0662 | 0332 | 0771 | 0662                 | 0771 | 0662 | 0331 | 0772 | 0662 | 0772 |

|   |   |  |   |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |
|---|---|--|---|--|--|--|--|---|--|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|
| Inflammation, Granulomatous Epithelium, Hyperplasia | 3 |  |   |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |
| Epithelium, Foot, Hyperplasia                       |   |  | 4 |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |
| Foot, Edema   |   |  | 4 |  |  |  |  | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| Foot, Fibrosis                                      |   |  | 4 |  |  |  |  | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| Foot, Inflammation, Chronic Active                  |   |  | 4 |  |  |  |  | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| Foot, Necrosis                                      |   |  |   |  |  |  |  | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |
| Foot, Ulcer   |   |  | 4 |  |  |  |  | 4 |  | 4 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

NERVOUS SYSTEM

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression           | 2 |   |   |   | 2 | 2 |   |   |   | 1 |   | 2 |   | 1 | 3 | 4 |   | 3 |   | 4 |   |   |   |   |   |   |   |   |
| Hemorrhage            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Ventricle, Dilatation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |
| Nerve Trigeminal      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |
| Axon, Degeneration    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | females<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------------------|
|   | 0599        | 0477  | 0727  | 0583  | 0687  | 0774  | 0779  | 0777  | 0552  | 0554  | 0445  | 0662  | 0778  | 0666  | 0665  | 0556  | 0552  | 0778  | 0668  | 0378  | 0770  | 0667  | 0663  | 0775  |           |                      |
|   | 00579       | 00477 | 00727 | 00583 | 00687 | 00774 | 00779 | 00777 | 00552 | 00554 | 00445 | 00662 | 00778 | 00666 | 00665 | 00556 | 00552 | 00778 | 00668 | 00378 | 00770 | 00667 | 00663 | 00775 | 00579     |                      |
|   | 00579       | 00477 | 00727 | 00583 | 00687 | 00774 | 00779 | 00777 | 00552 | 00554 | 00445 | 00662 | 00778 | 00666 | 00665 | 00556 | 00552 | 00778 | 00668 | 00378 | 00770 | 00667 | 00663 | 00775 | 00579     |                      |

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|
| Peripheral Nerve, Sciatic                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | + |   |
| Peripheral Nerve, Tibial                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + | + |
| Spinal Cord, Cervical<br>Axon, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + | + |
| Spinal Cord, Lumbar<br>Axon, Degeneration   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + | + |
| Spinal Cord, Thoracic<br>Axon, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | + | + |

**RESPIRATORY SYSTEM**

|   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|
| Lung  | + | + |  | + | + | + | + | + | + | + | + |   | + | + | + | + | + | + | + |   | + | + |   |   |  |  |  |  |
| Infiltration Cellular, Histiocyte                     |   |   |  | 1 |   |   | 3 | 2 |   |   |   | 2 |   |   |   | 1 | 2 |   | 2 | 1 |   |   | 1 | 1 |  |  |  |  |
| Inflammation, Chronic Active                          |   |   |  |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Metaplasia, Osseous                                   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Alveolar Epithelium, Hyperplasia                      |   |   |  |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Nose  | + | + |  | + | + |   | + |   | + | + | + | + |   | + | + | + | + | + | + |   | + | + |   |   |  |  |  |  |
| Foreign Body  |   | X |  |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Inflammation, Suppurative                             |   | 2 |  |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Inflammation, Chronic Active                          |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |  |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |  |  |  |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST | 0599  | 0477  | 0758  | 0668  | 0772  | 0770  | 0772  | 0584  | 0554  | 0475  | 0668  | 0773  | 0665  | 0665  | 0559  | 0756  | 0672  | 0378  | 0767  | 0660  | 0663  | 0762  | 0660  | 0762  | females<br>(cont...) |
|   | ANIMAL ID   | 00572 | 00581 | 00588 | 00591 | 00602 | 00606 | 00606 | 00606 | 00617 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 | 00627 |                      |

Respiratory Epithelium, Hyperplasia, Goblet Cell

2 2

Trachea

+ + + + + + + + + + A + + + + + +

SPECIAL SENSES SYSTEM

Ear

+

URINARY SYSTEM

Kidney

+ +

Casts Protein

1 2 1

Infiltration Cellular, Polymorphonuclear

Mineralization

1 1 1 1 1 1 1 1 1 1 2 2 1 1 1 1 1

Nephropathy

1 1 3 1 2 3 1 1 1 1 1 1 1 1 2 1

Cortex, Cyst

X X X X X X X X X X X X X X X X X

Renal Tubule, Cyst

X X X X X X X X X X X X X X X X X

Renal Tubule, Vacuolization Cytoplasmic

Transitional Epithelium, Hyperplasia

2 1 1 1

Urinary Bladder

+ +

Lumen, Dilatation

4 3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0527  | 0758  | 0633  | 0788  | 0779  | 0665  | 0222  | 0597  | 0581  | 0661  | 0446  | 0665  | 0654  | 0669  |          |
| ANIMAL ID   | 04921       | 04922 | 04931 | 04932 | 06681 | 06682 | 06691 | 06692 | 07700 | 07701 | 07710 | 07711 | 07770 | 07771 | 08811 | 08812 | 08881 | 08882 | 08883 | 08884 | 08885 | 08886 | 08887 | 08888 |          |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |          |

**ALIMENTARY SYSTEM**

|   |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |               |
|---|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------|
| Esophagus                               | +                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>36</b>     |
| Intestine Large, Colon                  | +                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>32</b>     |
| Intestine Small, Ileum                  | +                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>32</b>     |
| Intestine Small, Jejunum                |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b>      |
| Liver                                   | +                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>49</b>     |
| Angiectasis                             |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>5 2.8</b>  |
| Basophilic Focus                        | X X X X                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>18</b>     |
| Clear Cell Focus                        | X X                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>10</b>     |
| Degeneration, Cystic                    |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>3 1.0</b>  |
| Fatty Change                            | 3 3 1 3 3 2 3             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>15 2.6</b> |
| Hematopoietic Cell Proliferation        |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2 1.0</b>  |
| Hemorrhage                              |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 3.0</b>  |
| Hepatodiaphragmatic Nodule              |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>      |
| Infiltration Cellular, Mononuclear Cell | 1 1 2 1 1 1 2 1 X 1 2 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>29 1.2</b> |
| Inflammation, Chronic Active            |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 4.0</b>  |
| Mineralization                          | 1                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2 1.0</b>  |
| Mitotic Alteration                      |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1 3.0</b>  |
| Mixed Cell Focus                        |                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2</b>      |
| Tension Lipidosis                       | 4 4                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>6 3.2</b>  |
| Vacuolization Cytoplasmic               | 2 2 2 1 2                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>13 1.7</b> |
| Bile Duct, Hyperplasia                  | 2 3 1 2 1 1 2 3           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>18 1.8</b> |
| Biliary Tract, Fibrosis                 | 2                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>6 1.2</b>  |
| Hepatocyte, Necrosis                    | 1 4                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>2 2.5</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |     |     |     |     |   |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-----|-----|-----|-----|---|-----|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0577  | 0663  | 0778  | 0729  | 0665  | 0222  | 0597  | 0581  | 0664  | 0446  |          | 0665  | 0664  |     |     |     |     |   |     |
| ANIMAL ID   | 04921       | 04922 | 04923 | 04924 | 06681 | 06682 | 06683 | 06684 | 07701 | 07702 | 07703 | 07704 | 07705 | 07706 | 07707 | 08881 | 08882 | 08883 | 08884 | 08885 | 08886    | 08887 | 08888 |     |     |     |     |   |     |
| Oval Cell, Hyperplasia                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1   | 1   | 3   | 1.0 |   |     |
| Mesentery Fat, Necrosis                               | +           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |     | +   | 4   | 3   | 2 | 4.0 |
| Pancreas Basophilic Focus                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 49    |     | 1   |     |     |   |     |
| Pancreas Infiltration Cellular, Lymphocyte            |             |       | 1     | 1     |       |       |       | 1     | 1     | 2     | 3     |       | 1     | 1     |       | 3     | 1     |       | 3     | 1     | 1        | 1     | 2     | 28  | 1.4 |     |     |   |     |
| Pancreas Inflammation, Chronic Active                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       | 1   |     | 2.0 |     |   |     |
| Pancreas Lipomatosis                                  |             |       |       |       |       | 2     |       |       |       |       |       | 4     | 3     |       |       |       |       |       |       |       | 2        | 3     | 6     | 3.0 |     |     |     |   |     |
| Pancreas Pigmentation                                 |             |       | 1     |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       | 1     |          |       | 8     | 1.1 |     |     |     |   |     |
| Pancreas Acinar Cell, Hyperplasia                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1     |     | 3.0 |     |     |   |     |
| Pancreas Acinus, Degeneration                         |             |       | 1     | 2     |       |       |       | 1     | 3     | 4     | 3     | 1     | 2     | 2     |       | 4     | 1     |       | 3     | 2     | 1        | 1     | 2     | 29  | 2.1 |     |     |   |     |
| Stomach, Forestomach Inflammation, Chronic Active     | +           | +     | +     | +     | +     |       | +     | +     |       |       |       | +     | +     |       |       | +     | +     | +     | +     | +     | +        | +     | 36    |     | 1   | 4.0 |     |   |     |
| Stomach, Forestomach Ulcer                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |     |     | 1   | 4.0 |   |     |
| Stomach, Glandular Mineralization                     | +           | +     | +     | +     | +     |       | +     | +     |       |       |       | +     | +     |       |       | +     | +     | +     | +     | +     | +        | +     | 35    |     | 1   | 4.0 |     |   |     |
| <b>CARDIOVASCULAR SYSTEM</b>                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |     |     |     |     |   |     |
| Blood Vessel Mineralization                           | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 49    |     | 1   | 4.0 |     |   |     |
| Heart Cardiomyopathy                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | 49    |     | 35  | 1.3 |     |   |     |
| Heart Mineralization                                  |             |       | 1     |       |       |       | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 2     |       |       | 2     |       | 1        | 2     | 3     | 1   | 1   | 3.0 |     |   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0527  | 0768  | 0673  | 0778  | 0769  | 0625  | 0267  | 0598  | 0581  | 0661  | 0446  | 0665  |          | 0664 |
| ANIMAL ID   | 04921       | 04922 | 04931 | 04932 | 06611 | 06612 | 06661 | 06662 | 07701 | 07702 | 07771 | 07772 | 07773 | 07774 | 07775 | 08881 | 08882 | 08883 | 08884 | 08885 | 08886 | 08887 | 08888    |      |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        |      |

**ENDOCRINE SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |
| Angiectasis                       |   |   |   |   | 2 | 3 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 6  | 2.2 |
| Degeneration, Cystic Fibrosis     |   | 1 | 3 | 1 |   | 2 | 3 |   | 4 | 2 |   | 4 | 3 | 1 | 1 | 4 |   | 2 |   |   | 3 | 3 | 4 | 31 | 2.9 |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.7 |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 3  | 2.0 |
| Metaplasia, Osseous               |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Pigmentation                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Vacuolization Cytoplasmic         |   |   |   |   |   | 2 |   |   |   |   |   | 2 | 1 |   |   |   |   |   |   |   |   |   |   | 5  | 2.0 |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1.8 |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Parathyroid Gland                 | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |     |
| Hyperplasia                       |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1 | 5  | 2.0 |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Angiectasis                       |   |   |   |   | 3 |   |   |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   | 3 |   | 9  | 3.8 |
| Pars Distalis, Cyst               | X | X | X |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X |   |   |   |   |   | 10 |     |
| Pars Distalis, Hyperplasia        | 3 | 4 | 3 | 4 |   |   | 4 | 3 | 4 |   | 4 |   | 4 |   |   |   | 2 | 4 | 4 | 3 | 4 | 4 |   | 26 | 3.2 |
| Pars Distalis, Hypertrophy        |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Pars Intermedia, Cyst             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Rathke's Cleft, Cyst              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0527  | 0768  | 0779  | 0625  | 0769  | 0622  | 0559  | 0588  | 0667  | 0446  | 0625  | 0662  |          |
| ANIMAL ID   | 04921       | 04922 | 04931 | 04932 | 06681 | 06682 | 06691 | 06692 | 06701 | 06702 | 06711 | 06712 | 06721 | 06722 | 06881 | 06882 | 06883 | 06884 | 06885 | 06886 | 06887 | 06888 | 06889    |

|                                   |   |  |   |   |   |   |  |  |   |  |  |   |  |   |  |  |  |   |  |   |   |   |   |   |     |     |
|-----------------------------------|---|--|---|---|---|---|--|--|---|--|--|---|--|---|--|--|--|---|--|---|---|---|---|---|-----|-----|
| Infiltration Cellular, Lymphocyte | 1 |  |   |   |   |   |  |  |   |  |  |   |  |   |  |  |  |   |  |   |   |   |   | 2 | 1.0 |     |
| Ultimobranchial Cyst              |   |  |   |   |   |   |  |  |   |  |  |   |  |   |  |  |  | X |  |   |   |   |   |   | 3   |     |
| C-cell, Hyperplasia               |   |  | 1 | 1 | 2 | 1 |  |  | 1 |  |  | 1 |  |   |  |  |  | 2 |  |   | 1 | 2 | 1 | 2 | 18  | 1.4 |
| Follicular Cell, Hyperplasia      |   |  |   |   |   |   |  |  | 2 |  |  |   |  | 3 |  |  |  |   |  | 2 |   |   |   |   | 3   | 2.3 |

GENERAL BODY SYSTEM

|                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Tissue NOS          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |   |     |
| Metaplasia, Osseous |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 1 | 3.0 |

GENITAL SYSTEM

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |     |   |     |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|-----|---|-----|
| Clitoral Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |   |   |     |   |     |
| Hyperkeratosis            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 | 4 | 4   | 6 | 4.0 |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 3 | 2 | 3.5 |   |     |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 4 | 4 | 4   | 7 | 3.7 |

|                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |
|---------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Fat Pad, Ovarian/parametrial Necrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 4.0 |
|---------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|

|                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |    |     |
|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|----|-----|
| Ovary                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49 |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |    |     |
| Atrophy                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 4 | 3   | 2 | 46 | 2.6 |
| Cyst                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X  |   | X |   | X | X | X |   |   |   |   | X | X |   | 9   |   |    |     |
| Hyperplasia, Sertoliform    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |   |   |   |   |   |   |   |   |   |   |   |   | 5 | 1.4 |   |    |     |
| Pigmentation                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2.0 |   |    |     |
| Bilateral, Follicle, Cyst   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   | 1 |     |   |    |     |
| Bursa, Cyst                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   | 1 |     |   |    |     |
| Follicle, Cyst              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   | 7 |     |   |    |     |
| Granulosa Cell, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 4.0 |   |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0527  | 0768  | 0673  | 0778  | 0679  | 0625  | 0567  | 0551  | 0661  | 0446  |          | 0665  | 0664  | 0669  |       |       |       |       |
| ANIMAL ID   | 04921       | 04922 | 04931 | 04932 | 04981 | 04982 | 04989 | 04990 | 04991 | 04992 | 04993 | 04994 | 04995 | 04996 | 04997 | 04998 | 04999 | 05000 | 05001 | 05002 | 05003    | 05004 | 05005 | 05006 | 05007 | 05008 | 05009 | 05010 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |        |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|--------|
| Oviduct                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +      | 48     |
| Uterus                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +      | 49     |
| Atrophy                                  |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 3 |   |   |   |   | 3 | 2 |   |   |   |   |   |        | 9 3.0  |
| Metaplasia, Squamous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |        | 1 1.0  |
| Endometrium, Cyst                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 2      |
| Endometrium, Hyperplasia                 |   |   |   | 4 |   |   |   |   | 1 | 1 |   |   |   |   | 1 |   |   |   |   | 2 | 4 |   |   |   |   | 2 | 15 1.9 |        |
| Endometrium, Hyperplasia, Cystic         | 3 | 2 | 1 |   | 2 | 1 | 2 | 3 |   |   | 2 |   | 2 | 1 |   |   |   |   |   |   |   | 2 | 2 |   |   |   | 23 2.2 |        |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |        | 4 3.8  |
| Vagina                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +      | 49     |
| Atrophy                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 2 3.5  |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 3 2.3  |
| Epithelium, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 2 2.5  |
| Epithelium, Hyperplasia                  |   |   | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 2 |        | 10 2.3 |
| Epithelium, Mucification                 | 2 | 4 |   | 4 | 3 |   | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 |   | 3 | 3 | 4 | 3 |   |   | 4 |   |   | 39 3.4 |        |

HEMATOPOIETIC SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49    |
| Hypocellularity                              |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.0 |
| Myeloid Cell, Hyperplasia                    |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Lymph Node                                   |   | + |   |   |   |   |   |   | + | + |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   | 8     |
| Degeneration, Cystic                         |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Inguinal, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Lumbar, Degeneration, Cystic                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4.0 |
| Lumbar, Hyperplasia, Lymphoid                |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 3.3 |
| Lumbar, Infiltration Cellular, Plasma Cell   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 4.0 |
| Pancreatic, Degeneration, Cystic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|----------|
|   | 0579        | 0618  | 0543  | 0499  | 0708  | 0777  | 0555  | 0583  | 0727  | 0770  | 0527  | 0768  | 0779  | 0625  | 0769  | 0662  | 0557  | 0661  | 0446  | 0665  | 0652  | 0664  | 0669  |  |          |
| ANIMAL ID   | 04921       | 04922 | 04923 | 04924 | 04925 | 04926 | 04927 | 04928 | 04929 | 04930 | 04931 | 04932 | 04933 | 04934 | 04935 | 04936 | 04937 | 04938 | 04939 | 04940 | 04941 | 04942 | 04943 |  |          |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|---|----|-----|
| Pancreatic, Hyperplasia, Lymphoid  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |     |   |    |     |
| Renal, Degeneration, Cystic  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 3.0 |   |    |     |
| Renal, Infiltration Cellular, Plasma Cell                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4   | 4.0 |   |    |     |
| Lymph Node, Mandibular Degeneration, Cystic Infiltration Cellular, Plasma Cell |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 4.0 |   |    |     |
| Spleen Hematopoietic Cell Proliferation  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49  |     |   |    |     |
| Hyperplasia, Lymphoid  | 4 | 3 | 2 | 2 | 4 | 2 | 2 | 3 |   | 2 | 2 |   | 4 |   | 2 |   |   |   | 4 |   | 4 | 3 | 3 |   | 30 | 2.6 |     |   |    |     |
| Pigmentation   | 2 |   |   |   | 1 | 1 |   |   | 2 |   |   |   | 2 | 2 |   | 3 |   | 4 | 1 | 2 | 2 | 2 | 2 |   | 4  | 3   |     | 2 | 34 | 2.1 |
| Thymus Atrophy   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49  |     |   |    |     |
| Cyst   | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4  | 4   | 4   | 4 | 47 | 3.9 |
| Epithelial Cell, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   |     |   |    |     |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |   |    |     |

**INTEGUMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland Atypical Focus               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Hyperplasia, Lobular Inflammation, Chronic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |
| Alveolus, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |
| Duct, Dilatation                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 2.3 |
| Skin Cyst Epithelial Inclusion             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12 |     |
| Inflammation, Suppurative                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST | 0597  | 0618  | 0543  | 0499  | 0708  | 0772  | 0556  | 0553  | 0727  | 0770  | 0525  | 0763  | 0779  | 0622  | 0766  | 0770  | 0625  | 0598  | 0587  | 0644  | 0662  | 0664  | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | ANIMAL ID   | 04921 | 04992 | 04431 | 04993 | 06691 | 06692 | 06693 | 06694 | 07700 | 07701 | 07702 | 07703 | 07704 | 08811 | 08812 | 08813 | 08814 | 08815 | 08816 | 08817 | 08818 | 08819 |          |

|   |  |   |  |  |  |  |   |  |  |   |   |  |  |   |  |  |  |  |  |  |  |  |  |       |
|---|--|---|--|--|--|--|---|--|--|---|---|--|--|---|--|--|--|--|--|--|--|--|--|-------|
| Inflammation, Granulomatous Epithelium, Hyperplasia |  |   |  |  |  |  |   |  |  |   |   |  |  |   |  |  |  |  |  |  |  |  |  | 1 3.0 |
| Epithelium, Foot, Hyperplasia                       |  | 4 |  |  |  |  | 4 |  |  | 4 | 4 |  |  | 4 |  |  |  |  |  |  |  |  |  | 9 4.0 |
| Foot, Edema   |  | 4 |  |  |  |  |   |  |  | 2 |   |  |  | 4 |  |  |  |  |  |  |  |  |  | 6 3.7 |
| Foot, Fibrosis                                      |  | 4 |  |  |  |  | 4 |  |  | 4 | 4 |  |  | 4 |  |  |  |  |  |  |  |  |  | 9 4.0 |
| Foot, Inflammation, Chronic Active                  |  | 4 |  |  |  |  | 3 |  |  | 4 | 4 |  |  | 4 |  |  |  |  |  |  |  |  |  | 9 3.9 |
| Foot, Necrosis                                      |  | 4 |  |  |  |  |   |  |  | 4 | 4 |  |  | 4 |  |  |  |  |  |  |  |  |  | 6 4.0 |
| Foot, Ulcer   |  | 4 |  |  |  |  |   |  |  | 4 | 4 |  |  | 4 |  |  |  |  |  |  |  |  |  | 8 3.9 |

**MUSCULOSKELETAL SYSTEM**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

**NERVOUS SYSTEM**

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Brain, Brain Stem     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |
| Compression           |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   | 3 |   |   |   |   |   |   | 2 |   | 14 2.6 |
| Hemorrhage            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Brain, Cerebellum     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |
| Brain, Cerebrum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |
| Hemorrhage            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Ventricle, Dilatation |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 4 2.0  |
| Nerve Trigeminal      |   |   |   |   |   | + |   |   | + | + | + |   | + |   |   |   | + | + | + | + |   |   |   | 12     |
| Axon, Degeneration    |   |   |   |   |   | 3 |   |   | 1 | 2 | 1 |   | 1 |   | 1 |   | 1 |   | 1 |   |   |   |   | 10 1.3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |    | * TOTALS |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----------|-----|
|   | 0597        | 0618  | 0543  | 0499  | 0708  | 0777  | 0556  | 0583  | 0727  | 0770  | 0578  | 0673  | 0778  | 0729  | 0665  | 0222  | 0597  | 0581  | 0667  | 0446  | 0665  | 0664  | 0669  |    |          |     |
| ANIMAL ID   | 04921       | 04922 | 04931 | 04932 | 04961 | 04962 | 04966 | 04967 | 04970 | 04971 | 04977 | 04978 | 04980 | 04981 | 04988 | 04989 | 04991 | 04993 | 04994 | 04998 | 05001 | 05004 | 05005 |    |          |     |
| Peripheral Nerve, Sciatic                             |             |       |       |       | +     |       |       |       |       | +     | +     | +     |       | +     |       |       |       |       | +     | +     | +     | +     |       | 12 |          |     |
| Peripheral Nerve, Tibial                              |             |       |       |       | +     |       |       |       |       | +     | +     | +     |       | +     |       |       |       |       | +     | +     | +     | +     |       | 12 |          |     |
| Spinal Cord, Cervical<br>Axon, Degeneration           |             |       |       |       | +     |       |       |       |       | +     | +     | +     |       | +     |       | 1     |       |       | +     | +     | +     | +     |       | 12 | 1        | 1.0 |
| Spinal Cord, Lumbar<br>Axon, Degeneration             |             |       |       |       | +     |       | 3     |       |       | +     | +     | +     |       | +     |       | 1     |       | 1     |       | +     | +     | +     | +     | 12 | 5        | 1.6 |
| Spinal Cord, Thoracic<br>Axon, Degeneration           |             |       |       |       | +     |       |       |       |       | +     | +     | +     |       | +     |       | 1     |       |       | +     | +     | +     | +     |       | 12 | 1        | 1.0 |
| <b>RESPIRATORY SYSTEM</b>                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |    |          |     |
| Lung  |             | +     | +     | +     | +     | +     | +     | +     |       | +     | +     |       |       |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | 39 |          |     |
| Infiltration Cellular, Histiocyte                     | 1           |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       | 12 | 1.6      |     |
| Inflammation, Chronic Active                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 2.0      |     |
| Metaplasia, Osseous                                   | 1           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 1.0      |     |
| Alveolar Epithelium, Hyperplasia                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  | 2.0      |     |
| Nose  |             | +     | +     | +     | +     | +     | +     | +     |       | +     | +     |       |       |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | 36 |          |     |
| Foreign Body  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       | X     | 5  |          |     |
| Inflammation, Suppurative                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       | 1     | 5  | 1.6      |     |
| Inflammation, Chronic Active                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       | 1  | 2.0      |     |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 1           |       | 3     |       |       |       |       | 2     |       |       |       | 4     |       |       |       |       |       | 1     | 2     | 3     | 1     | 2     | 2     | 12 | 2.1      |     |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       | 2     | 2  | 2.0      |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| DAY ON TEST                  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| <b>SPRAGUE DAWLEY (NCTR)</b> | 5               | 6 | 5 | 4 | 7 | 7 | 5 | 5 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 6 | 2 | 5 | 5 | 6 | 4 | 6 | 6 | 6 | 6 | 6 | 6 |   |  |
| <b>RATS FEMALE</b>           | 9               | 1 | 4 | 9 | 0 | 2 | 0 | 8 | 2 | 2 | 5 | 2 | 9 | 2 | 2 | 0 | 6 | 9 | 8 | 7 | 4 | 2 | 5 | 4 | 9 |   |   |   |  |
| <b>F1 250.0BPA F</b>         | 7               | 8 | 3 | 9 | 8 | 7 | 6 | 3 | 7 | 0 | 7 | 8 | 3 | 8 | 9 | 5 | 2 | 7 | 1 | 1 | 6 | 5 | 2 | 9 |   |   |   |   |  |
| <b>ANIMAL ID</b>             | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|                              | 4               | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |  |
|                              | 9               | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |   |  |
|                              | 2               | 2 | 3 | 3 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 |   |  |
|                              | 1               | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |   |  |
|                              | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

Respiratory Epithelium, Hyperplasia, Goblet Cell 2 2.0

Trachea 34

**SPECIAL SENSES SYSTEM**

Ear 1

**URINARY SYSTEM**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           |   |          |     |       |   |   |   |   |   |        |        |   |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|---|----------|-----|-------|---|---|---|---|---|--------|--------|---|
| Kidney                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>49</b> |   |          |     |       |   |   |   |   |   |        |        |   |
| Casts Protein                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1         | 1 | 5 1.2    |     |       |   |   |   |   |   |        |        |   |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           | 2 | 1 2.0    |     |       |   |   |   |   |   |        |        |   |
| Mineralization                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2         | 2 | 1        | 1   | 1     | 1 | 2 | 1 | 2 | 2 | 1      | 25 1.3 |   |
| Nephropathy                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2         | 2 | 2        |     | 4     | 1 | 2 | 1 | 1 | 4 | 21 1.7 |        |   |
| Cortex, Cyst                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X         |   |          | X   |       | X |   | X |   | X |        | X      | 7 |
| Renal Tubule, Cyst                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           | X |          | X   |       | X |   | X |   | X |        | 15     |   |
| Renal Tubule, Vacuolization Cytoplasmic  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           |   |          |     |       |   |   |   |   | 3 | 1 3.0  |        |   |
| Transitional Epithelium, Hyperplasia     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3         | 1 |          |     | 1     |   | 1 |   |   |   | 8 1.4  |        |   |
| Urinary Bladder                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           |   | <b>2</b> |     |       |   |   |   |   |   |        |        |   |
| Lumen, Dilatation                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           |   | 2        | 3.5 | 2 3.5 |   |   |   |   |   |        |        |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|
|   | 0613        | 0702  | 0707  | 0426  | 0722  | 0618  | 0447  | 0542  | 0444  | 0444  | 0545  | 0552  | 0626  | 0267  | 0622  | 0090  | 0426  | 0722  | 0722  | 0523  | 0255  | 0858  | 0666  | 0777  |                      | 0674  |
| ANIMAL ID   | 00731       | 00734 | 00741 | 00742 | 00751 | 00752 | 00761 | 00762 | 00771 | 00772 | 00781 | 00782 | 00791 | 00792 | 00801 | 00802 | 00811 | 00812 | 00821 | 00822 | 00831 | 00832 | 00841 | 00842 | 00851                | 00852 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0                    |       |

**ALIMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                                | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon                   | + | + |   | + | + | + | + | + | + | + | + | + | A | + | + |   | A | + | A | + | + | + | + | + | + |
| Intestine Small, Ileum                   | + | + |   | + | + | + |   | A | + | + | + | + | A | + | + |   | A |   | A | A | + | + | + | + | + |
| Intestine Small, Jejunum<br>Diverticulum |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Basophilic Focus                         | X | X |   |   |   | X |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |
| Clear Cell Focus                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                             |   |   |   |   |   | 2 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 |
| Fibrosis                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hematopoietic Cell Proliferation         |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule               |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |
| Infiltration Cellular, Mononuclear Cell  |   |   |   | 2 | 1 | 1 | 1 | 1 | 1 |   |   | 1 | 2 | 1 | 2 |   |   |   |   |   | 1 |   |   |   | 2 |
| Inflammation, Chronic                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |
| Mineralization                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|
|   | 0613        | 0702 | 0727 | 0426 | 0727 | 0648 | 0452 | 0544 | 0444 | 0444 | 0545 | 0522 | 0627 | 0267 | 0279 | 0040 | 0046 | 0077 | 0053 | 0025 |           |                      | 0058 | 0046 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    |
|   | 7           | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9         | 9                    | 9    | 9    |
|   | 3           | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 7    | 9    | 9    | 0    | 1    | 1    | 2    | 2    | 3    | 3    | 5    | 5         | 6                    | 6    | 7    |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                    | 1    | 2    |

Biliary Tract, Cyst  
Biliary Tract, Fibrosis  
Hepatocyte, Necrosis  
Oval Cell, Hyperplasia

X  
2  
1  
1  
1

Mesentery  
Fat, Necrosis

Pancreas  
Basophilic Focus  
Infiltration Cellular, Lymphocyte  
Inflammation, Chronic Active  
Lipomatosis  
Pigmentation  
Acinus, Degeneration

+  
X  
1 2 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1  
2  
4  
1 1 2 2 2 2 3 1 1 2 2 2  
2 4 4 4 1 1 2 2 2 2 3 1 1 2 2 2

Stomach, Forestomach

+ +

Stomach, Glandular

+ + + + + + + + + + + A + + A + A + + + + +

CARDIOVASCULAR SYSTEM

Blood Vessel  
Intima, Inflammation, Chronic  
Intima, Proliferation

+ +

Heart  
Cardiomyopathy  
Metaplasia, Osseous  
Thrombosis

+  
1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 2  
1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |
|---|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | ANIMAL ID | 6           | 7 | 7 | 4 | 7 | 6 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 6 | 2 | 6 | 7 | 7 | 7 | 5 | 2 | 5 | 4 | 5 |                      |
|   |           | 1           | 0 | 2 | 2 | 2 | 1 | 4 | 6 | 4 | 2 | 7 | 6 | 2 | 7 | 9 | 0 | 4 | 6 | 1 | 8 | 3 | 5 | 8 | 6 | 7                    |
|   |           | 3           | 2 | 7 | 6 | 7 | 8 | 7 | 2 | 9 | 0 | 4 | 3 | 2 | 2 | 0 | 4 | 6 | 1 | 8 | 7 | 7 | 0 | 6 | 7 |                      |
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 5                    |
|   |           | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0                    |
|   |           | 3           | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 5 | 5 | 6 |                      |
|   |           | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |                      |

ENDOCRINE SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |
| Degeneration, Cystic         | 1 | 2 | 1 |   |   | 4 |   | 4 | 4 |   |   | 4 | 1 | 2 |   | 1 | 4 | 3 | 3 |   |   |   | 1 |   | 4 |
| Hyperplasia                  |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hypertrophy                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Pigmentation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic    |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Pituitary Gland              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                  | 3 |   |   |   |   | 2 |   |   | 2 |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   |   |
| Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Cyst          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia   | 4 | 2 | 2 | 2 |   | 4 | 4 |   | 1 | 2 | 4 | 4 |   |   | 2 | 1 |   |   |   |   | 4 |   |   | 3 |   |
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ultimobranchial Cyst         |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          |   |   |   |   | 2 | 3 |   | 1 |   | 1 |   | 1 |   |   |   | 2 |   |   |   |   |   | 2 |   |   | 2 |
| Follicular Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F             | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|   | 0613        | 0702  | 0707  | 0708  | 0711  | 0712  | 0714  | 0715  | 0716  | 0717  | 0718  | 0719  | 0720  | 0721  | 0722  | 0723  | 0724  | 0725  | 0726  | 0727  | 0728  | 0729  | 0730  |       |                      |
| ANIMAL ID   | 00731       | 00732 | 00734 | 00735 | 00736 | 00737 | 00738 | 00739 | 00740 | 00741 | 00742 | 00743 | 00744 | 00745 | 00746 | 00747 | 00748 | 00749 | 00750 | 00751 | 00752 | 00753 | 00754 | 00755 |                      |
| Endometrium, Hyperplasia  | 2           |       |       |       | 1     | 2     |       |       | 2     |       |       |       |       |       |       |       |       | 1     | 2     |       |       | 1     |       |       |                      |
| Endometrium, Hyperplasia, Cystic Lumen, Dilatation                |             | 2     |       |       | 2     |       |       | 1     |       |       | 1     | 3     | 4     |       |       |       | 1     | 3     |       |       | 4     |       | 2     | 2     |                      |
| Vagina Atrophy  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |             | 4     |       | 4     |       |       | 2     |       |       |       | 2     |       |       |       |       |       | 3     |       | 2     |       |       |       |       |       |                      |
| Epithelium, Hyperplasia   |             |       | 3     |       |       |       |       |       |       |       |       | 4     | 3     |       |       |       |       |       |       | 4     |       | 2     |       | 3     |                      |
| Epithelium, Mucification  | 4           | 4     |       | 3     | 4     | 3     | 2     |       | 3     | 2     |       |       |       | 4     |       | 3     |       | 4     |       | 2     |       | 4     | 3     | 3     |                      |
| <b>HEMATOPOIETIC SYSTEM</b>                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Bone Marrow Hypocellularity                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Myeloid Cell, Hyperplasia   |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |                      |
| Lymph Node Inguinal, Infiltration Cellular, Plasma Cell           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | +     |       |       |       |       |       | +     |       |                      |
| Lymph Node, Mandibular Degeneration, Cystic Hemorrhage            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |                      |
| Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |                      |
| Spleen Hematopoietic Cell Proliferation                           | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
|   | 1           | 2     |       | 2     | 3     | 3     | 2     | 4     |       | 2     | 3     | 2     | 2     |       |       |       |       | 3     |       |       |       | 1     | 4     | 1     |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|   | 0613        | 0702  | 0707  | 0426  | 0722  | 0618  | 0447  | 0542  | 0444  | 0444  | 0545  | 0552  | 0626  | 0266  | 0272  | 0677  | 0272  | 0221  | 0778  | 0557  | 0255  | 0580  | 0466  | 0577  | 0674  |                      |
| ANIMAL ID   | 00731       | 00733 | 00734 | 00742 | 00751 | 00752 | 00761 | 00762 | 00771 | 00772 | 00781 | 00782 | 00791 | 00792 | 00801 | 00802 | 00811 | 00812 | 00821 | 00822 | 00831 | 00832 | 00841 | 00842 | 00851 |                      |
| Pigmentation  | 1           |       | 2     | 2     | 1     |       | 2     |       | 3     | 2     |       | 3     | 3     | 3     |       |       | 3     | 4     | 2     |       | 4     | 3     | 3     | 3     | 2     |                      |
| Capsule, Fibrosis                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Thymus  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Atrophy   | 4           | 4     | 4     | 4     | 4     | 3     | 3     | 4     | 2     | 2     | 3     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4     |       | 4     | 3     | 3     | 4     |                      |
| Cyst  |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |                      |
| Epithelial Cell, Hyperplasia                          |             |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |

INTEGUMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Atypical Focus                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Hyperplasia, Lobular                     | 4 | 3 | 1 |   | 4 | 2 | 3 | 3 | 2 | 2 |   | 2 | 2 |   |   | 3 | 4 | 4 | 4 | 4 |   | 2 | 3 | 4 | 4 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Dilatation                     |   |   |   |   |   |   |   |   | 2 |   |   |   | 2 | 2 |   |   |   |   |   |   |   | 2 |   | 3 |   |
| Duct, Dilatation                         |   |   |   |   |   |   |   |   | 2 |   |   | 2 | 3 | 2 |   |   |   |   |   |   |   | 3 |   | 3 |   |
| Duct, Hyperplasia                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Skin                                     |   |   | + |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   | + | + |   |   | + |   |
| Cyst Epithelial Inclusion                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Epithelium, Foot, Hyperplasia            |   |   | 4 |   |   |   |   |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   | 3 |   |
| Foot, Bacterium                          |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foot, Edema                              |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   | 3 |   |
| Foot, Fibrosis                           |   |   | 4 |   |   |   |   |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   | 3 |   |
| Foot, Inflammation, Chronic Active       |   |   | 4 |   |   |   |   |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   | 3 |   |
| Foot, Necrosis                           |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |
| Foot, Ulcer                              |   |   | 4 |   |   |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST | 0613  | 0702  | 0727  | 0426  | 0718  | 0647  | 0542  | 0442  | 0444  | 0552  | 0442  | 0447  | 0522  | 0627  | 0290  | 0674  | 0722  | 0778  | 0553  | 0255  | 0586  | 0467  | 0577  | 0674  |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | ANIMAL ID   | 00731 | 00734 | 00741 | 00742 | 00751 | 00752 | 00762 | 00767 | 00777 | 00788 | 00789 | 00799 | 00800 | 00811 | 00822 | 00831 | 00842 | 00853 | 00862 | 00875 | 00880 | 00896 | 00906 | 00917 |

females (cont...)

MUSCULOSKELETAL SYSTEM

Bone  
Cranium, Fracture

+  
X

Bone, Femur

+ +

Skeletal Muscle

NERVOUS SYSTEM

Brain, Brain Stem  
Compression

+ + + + 2 +

Brain, Cerebellum

+ +

Brain, Cerebrum  
Ventricle, Dilatation

+ 2 2

Nerve Trigeminal  
Axon, Degeneration

+ 1 + 1 + + + +

Peripheral Nerve, Sciatic

+ + + + + +

Peripheral Nerve, Tibial

+ + + + +

Spinal Cord, Cervical

+ + + + +

Spinal Cord, Lumbar  
Axon, Degeneration

+ 3 + + 1 + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |   |   |   |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|---|---|---|
|   | 0613        | 0702 | 0707 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 | 0708 |           |                      | 0708 |   |   |   |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0 | 0 | 0 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0 | 0 | 0 |
|   | 7           | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7         | 7                    | 7    | 7 | 7 | 7 |
|   | 3           | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 7    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9         | 9                    | 9    | 9 | 9 | 9 |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                    | 1    | 2 | 1 | 2 |

Spinal Cord, Thoracic + + + + + + + +

**RESPIRATORY SYSTEM**

|  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung   | + | + |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Congestion   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Hemorrhage   |   |   |  |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte                      |   |   |  |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 3 |   | 3 |
| Metaplasia, Osseous                                    |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Alveolar Epithelium, Hyperplasia                       |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Nose   | + | + |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active                           |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Trachea  | + | + |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**SPECIAL SENSES SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cataract             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retina, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Zymbal's Gland       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST | 0613  | 0702  | 0702  | 0422  | 0721  | 0644  | 0452  | 0442  | 0442  | 0542  | 0552  | 0622  | 0267  | 0267  | 0722  | 0772  | 0772  | 0523  | 0255  | 0588  | 0466  | 0577  | 0664  | females<br>(cont...) |
|   | ANIMAL ID   | 00731 | 00734 | 00741 | 00742 | 00751 | 00752 | 00761 | 00762 | 00771 | 00772 | 00781 | 00782 | 00791 | 00792 | 00799 | 00799 | 00799 | 00799 | 00799 | 00799 | 00799 | 00799 | 00799 |                      |

URINARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Casts Protein                        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   | 2 |   |   |
| Mineralization                       |   | 1 |   |   |   | 1 | 1 |   |   | 3 |   | 1 |   | 3 | 1 |   | 1 |   |   |   | 1 |   |   | 1 |
| Nephropathy                          |   | 1 |   |   | 2 | 1 |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   | 3 | 1 |
| Cortex, Cyst                         |   |   | X |   |   |   | X |   |   |   | X |   |   | X |   |   |   |   | X |   |   |   |   |   |
| Renal Tubule, Cyst                   |   | X |   |   | X |   | X |   |   |   | X |   | X |   |   |   |   | X |   | X |   |   |   |   |
| Transitional Epithelium, Hyperplasia |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked





Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST   |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               | * TOTALS      |               |               |               |               |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   | 04<br>68      | 07<br>20      | 04<br>71      | 06<br>45      | 07<br>79      | 07<br>75      | 07<br>76      | 06<br>63      | 04<br>49      | 06<br>61      | 05<br>59      | 06<br>67      | 06<br>68      | 05<br>50      | 06<br>68      | 04<br>43      | 04<br>49      | 06<br>63      | 07<br>72      | 04<br>47      |               | 07<br>77      | 05<br>55      | 05<br>56      | 05<br>58      |
|   | 05<br>07<br>2 | 05<br>08<br>1 | 05<br>08<br>2 | 05<br>09<br>1 | 07<br>01<br>2 | 07<br>01<br>2 | 07<br>01<br>3 | 07<br>01<br>2 | 07<br>01<br>4 | 07<br>01<br>2 | 07<br>01<br>1 | 07<br>01<br>5 | 07<br>01<br>2 | 07<br>01<br>1 | 08<br>09<br>1 | 08<br>09<br>2 | 08<br>09<br>1 | 08<br>09<br>2 | 08<br>09<br>1 | 08<br>09<br>2 | 08<br>09<br>1 | 08<br>09<br>2 | 08<br>09<br>1 | 09<br>00<br>2 | 09<br>00<br>0 |

|                         |  |  |  |   |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  |   |     |
|-------------------------|--|--|--|---|--|--|--|--|--|---|--|--|---|--|--|--|--|--|--|---|--|--|--|--|--|---|-----|
| Biliary Tract, Cyst     |  |  |  |   |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  | 1 |     |
| Biliary Tract, Fibrosis |  |  |  | 1 |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  | 2 |  |  |  |  |  | 5 | 1.4 |
| Hepatocyte, Necrosis    |  |  |  |   |  |  |  |  |  | 1 |  |  | 3 |  |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 2.3 |
| Oval Cell, Hyperplasia  |  |  |  |   |  |  |  |  |  |   |  |  |   |  |  |  |  |  |  |   |  |  |  |  |  | 1 | 1.0 |

|               |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |   |     |
|---------------|--|--|--|--|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|-----|
| Mesentery     |  |  |  |  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 4 |     |
| Fat, Necrosis |  |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 | 4 | 4.0 |

|                                   |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|-----------------------------------|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Pancreas                          |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     | 49  |
| Basophilic Focus                  |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |
| Infiltration Cellular, Lymphocyte |   |   | 1 | 1 |   | 1 | 1 |   |  |  |   |   | 3 |   |   | 2 | 2 |   |   | 1 | 1 |   | 3 | 3 | 2 |   | 1  | 28  | 1.5 |
| Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |
| Lipomatosis                       |   |   |   |   |   |   |   | 3 |  |  |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 3  | 3.3 |     |
| Pigmentation                      |   |   |   |   |   |   |   |   |  |  |   | 2 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.3 |     |
| Acinus, Degeneration              | 2 | 1 | 2 |   | 1 | 1 |   |   |  |  | 4 |   |   | 2 | 2 |   |   | 1 | 2 | 3 |   | 4 | 4 | 4 |   | 2 | 31 | 2.3 |     |

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| Stomach, Forestomach |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 39 |
| Stomach, Glandular   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 36 |

CARDIOVASCULAR SYSTEM

|                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |     |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|-----|
| Blood Vessel                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 50  |     |
| Intima, Inflammation, Chronic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 2 | 1   | 2.0 |
| Intima, Proliferation         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 2.0 |     |

|                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |     |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|-----|
| Heart               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 50  |     |
| Cardiomyopathy      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 33  | 1.4 |
| Metaplasia, Osseous |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1.0 |     |
| Thrombosis          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |     |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                      | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |   |
|--|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|
|  |                      | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0 |   |   |
|  |                      | 4           | 7 | 4 | 6 | 7 | 7 | 6 | 4 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 4 | 6 | 7 | 4 | 7 |          | 7 | 5 | 5 | 5 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |                      | 6           | 2 | 7 | 4 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 7 | 7 | 0 | 8 | 3 | 9 | 3 | 2 | 2 | 2        | 9 | 0 | 8 |   |
|  |                      | 8           | 0 | 1 | 5 | 9 | 5 | 6 | 3 | 9 | 1 | 9 | 7 | 8 | 6 | 0 | 5 | 0 | 9 | 8 | 7 | 7        | 8 | 5 | 6 | 2 |
|  | <b>F1 2500.BPA F</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0 |
|  | <b>ANIMAL ID</b>     | 5           | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8        | 8 | 9 | 9 | 9 |
|  |                      | 0           | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9        | 9 | 0 | 0 | 0 |
|  |                      | 7           | 8 | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 9        | 9 | 0 | 0 | 0 |
|  |                      | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 1 | 2 | 0 | 2 |

**ENDOCRINE SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Adrenal Cortex               | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |
| Angiectasis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  | 3.0 |     |
| Degeneration, Cystic         |   | 1 |   | 4 | 4 | 2 | 1 | 4 |   | 4 |   | 4 | 4 |   |   |   | 2 | 3 |   |   | 3 | 1 | 2 |   |   | 29 | 2.7 |     |
| Hyperplasia                  |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 1.5 |
| Hypertrophy                  |   |   |   |   | 3 | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4   | 2.0 |
| Pigmentation                 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |
| Vacuolization Cytoplasmic    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 1.0 |
| Adrenal Medulla              | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |
| Islets, Pancreatic           | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |
| Parathyroid Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |
| Hyperplasia                  |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 1.3 |
| Pituitary Gland              | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |
| Angiectasis                  |   | 4 | 3 |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 9   | 3.3 |
| Hemorrhage                   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Pars Distalis, Cyst          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   | X |   |    | 3   |     |
| Pars Distalis, Hyperplasia   |   | 4 |   | 4 |   | 3 |   |   |   |   |   | 2 | 2 |   | 4 | 4 | 4 | 4 | 3 | 1 |   | 2 | 2 | 2 |   | 3  | 29  | 2.9 |
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |
| Ultimobranhial Cyst          |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |    | 4   |     |
| C-cell, Hyperplasia          |   | 2 |   | 3 | 2 |   | 2 |   |   |   |   | 1 | 2 | 2 | 1 |   |   |   | 1 | 1 |   |   |   | 1 | 2 |    | 20  | 1.7 |
| Follicular Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |

**GENERAL BODY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

|                              |             |                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|-------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                              |             | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                              | DAY ON TEST | 4               | 7 | 4 | 6 | 7 | 7 | 7 | 6 | 4 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 4 | 6 | 7 | 7 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |   |
| <b>SPRAGUE DAWLEY (NCTR)</b> |             | 6               | 2 | 7 | 4 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 7 | 7 | 0 | 8 | 3 | 9 | 3 | 2 | 2 | 9 | 0 | 0 | 8 | 8 | 8 | 8 |   |
| <b>RATS FEMALE</b>           |             | 8               | 0 | 1 | 5 | 9 | 5 | 6 | 3 | 9 | 1 | 9 | 7 | 8 | 6 | 0 | 5 | 0 | 8 | 7 | 8 | 7 | 5 | 6 | 6 | 2 | 2 | 2 |   |
| <b>F1 2500.BPA F</b>         |             | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              | ANIMAL ID   | 5               | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 |
|                              |             | 0               | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 7               | 8 | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 |
|                              |             | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
|                              |             | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Tissue NOS + 1

**GENITAL SYSTEM**

|                                       |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          |            |            |            |
|---------------------------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|--|----------|------------|------------|------------|
| Clitoral Gland                        | + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>8</b> |  |          |            |            |            |
| Fibrosis                              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   | <b>4.0</b> |            |
| Hyperkeratosis                        |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   | <b>4.0</b> |            |
| Inflammation, Suppurative             |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>5</b>   | <b>3.8</b> |            |
| Duct, Dilatation                      |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  | <b>7</b> | <b>3.3</b> |            |            |
| Fat Pad, Ovarian/parametrial Necrosis |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   |            |            |
|                                       |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>4</b>   | <b>1</b>   | <b>4.0</b> |
| Ovary                                 |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>50</b>  |            |            |
| Atrophy                               |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          |            | <b>45</b>  | <b>2.7</b> |
| Cyst                                  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          |            | <b>2</b>   |            |
| Hyperplasia, Sertoliform              |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          |            | <b>6</b>   | <b>1.8</b> |
| Bursa, Cyst                           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   |            |            |
| Corpus Luteum, Hypertrophy            |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   | <b>4.0</b> |            |
| Follicle, Cyst                        |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>6</b>   |            |            |
| Granulosa Cell, Hyperplasia           |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   | <b>4.0</b> |            |
| Oviduct                               |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>47</b>  |            |            |
| Epithelium, Hyperplasia               |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   | <b>3.0</b> |            |
| Uterus                                |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>48</b>  |            |            |
| Atrophy                               |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>4</b>   | <b>3.3</b> |            |
| Metaplasia, Squamous                  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>4</b>   | <b>1.8</b> |            |
| Endometrial Glands, Hyperplasia       |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>2</b>   | <b>2.5</b> |            |
| Endometrium, Cyst                     |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |          | <b>1</b>   |            |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F             | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |    |    |     |     |     |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|-----|-----|-----|
|   | 04          | 07 | 04 | 06 | 07 | 07 | 07 | 06 | 04 | 06 | 05 | 06 | 06 | 05 | 06 | 04 | 04 | 06 | 07 | 04 |          | 07 | 07 | 05 | 05 | 05 |     |     |     |
| ANIMAL ID   | 06          | 02 | 07 | 04 | 02 | 02 | 02 | 02 | 03 | 04 | 04 | 07 | 07 | 08 | 06 | 04 | 03 | 09 | 03 | 02 | 02       | 09 | 00 | 08 |    |    |     |     |     |
|   | 08          | 00 | 01 | 05 | 09 | 05 | 06 | 03 | 09 | 01 | 09 | 07 | 08 | 06 | 00 | 08 | 03 | 05 | 00 | 08 | 07       | 07 | 08 | 05 | 06 | 02 |     |     |     |
| Endometrium, Hyperplasia  | 1           |    |    |    | 1  |    |    |    |    |    |    |    |    | 2  |    |    |    |    |    | 1  |          |    | 1  |    | 1  | 15 | 1.3 |     |     |
| Endometrium, Hyperplasia, Cystic Lumen, Dilatation                |             | 3  |    | 2  |    |    | 2  | 3  |    |    |    | 3  |    | 3  | 3  |    |    | 2  |    |    | 2        |    |    | 1  |    | 22 | 2.4 |     |     |
| Vagina Atrophy  |             |    |    | 4  |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    | 50 | 1   | 3.0 |     |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |             |    |    |    |    |    | 2  |    |    |    |    |    |    |    |    |    | 3  |    |    | 3  |          |    | 3  |    |    | 6  | 3.3 |     |     |
| Epithelium, Hyperplasia   |             |    | 3  |    |    |    |    | 3  |    | 4  |    |    |    | 2  | 2  |    |    |    |    |    |          |    | 4  |    |    | 11 | 3.0 |     |     |
| Epithelium, Mucification  | 2           | 4  |    | 4  | 2  | 4  |    |    | 4  |    | 4  | 4  |    | 3  | 4  | 4  | 2  | 4  | 2  | 3  | 4        | 3  | 2  |    | 4  | 34 | 3.3 |     |     |
| <b>HEMATOPOIETIC SYSTEM</b>                                       |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |     |     |     |
| Bone Marrow Hypocellularity                                       | +           | +  | +  | +  | +  | +  | +  | +  | A  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +        | +  | +  | +  | +  | 49 | 2   | 3.5 |     |
| Myeloid Cell, Hyperplasia   |             |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |    |    | 3  |    |    |          |    |    |    |    | 3  | 3   | 3.7 |     |
| Lymph Node Inguinal, Infiltration Cellular, Plasma Cell           | +           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | +        |    |    |    |    | 4  | 1   | 4.0 |     |
| Lumbar, Infiltration Cellular, Plasma Cell                        |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    | 4  |    |    |    | 1   | 4.0 |     |
| Popliteal, Infiltration Cellular, Plasma Cell                     |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    | 4  |    |    |    | 1   | 4.0 |     |
| Lymph Node, Mandibular Degeneration, Cystic Hemorrhage            | +           |    |    |    |    |    |    |    |    |    |    |    |    |    |    | +  |    |    |    |    |          |    |    |    |    | 4  | 1   | 3.0 |     |
| Hyperplasia, Lymphoid Infiltration Cellular, Plasma Cell          |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |          |    |    |    |    | 4  | 2   | 3.5 |     |
| Spleen Hematopoietic Cell Proliferation                           |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    | 50  | 30  | 2.4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |  |
|---|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--|
|   |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |   |          |  |
|   |           | 4           | 7 | 4 | 6 | 7 | 7 | 7 | 6 | 4 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 4 | 6 | 7 | 4 | 7 | 7 | 5 | 5 | 5 | 5 |          |  |
|   |           | 6           | 2 | 7 | 4 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 7 | 7 | 0 | 8 | 3 | 9 | 3 | 2 | 5 | 2 | 2 | 9 | 0 | 8 | 8 |          |  |
|   |           | 8           | 0 | 1 | 5 | 9 | 5 | 6 | 3 | 9 | 1 | 9 | 7 | 8 | 6 | 0 | 5 | 0 | 9 | 8 | 7 | 8 | 7 | 8 | 5 | 6 | 2 |          |  |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | ANIMAL ID | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |  |
|   |           | 5           | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9        |  |
|   |           | 0           | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |          |  |
|   |           | 7           | 8 | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 2 | 0 | 0 |   |          |  |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Pigmentation                 |   |   |   | 3 | 1 | 1 | 4 | 3 | 4 | 4 | 2 |   | 2 | 4 |   | 2 | 4 | 3 | 3 |   | 2 | 3 |   | 4 |   | 35 | 2.7 |
| Capsule, Fibrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 1  | 3.0 |
| Thymus                       | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Atrophy                      | 3 | 4 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 47 | 3.7 |
| Cyst                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Epithelial Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |

**INTEGUMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Atypical Focus                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   |   | 3  | 1.7 |
| Hyperplasia, Lobular                     | 3 | 4 |   | 2 | 2 | 4 | 4 |   | 2 | 4 |   | 2 | 3 | 3 | 4 |   | 2 | 3 | 2 | 3 | 4 | 2 | 2 |   | 3 | 40 | 3.0 |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Alveolus, Dilatation                     |   |   | 2 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 7  | 2.1 |
| Duct, Dilatation                         |   |   | 3 | 2 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 9  | 2.6 |
| Duct, Hyperplasia                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Skin                                     | + | + | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   | + | + |   |   |   |   | 13 |     |
| Cyst Epithelial Inclusion                |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Hemorrhage                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Epithelium, Foot, Hyperplasia            | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 | 4 |   |   |   |   | 11 | 3.9 |
| Foot, Bacterium                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Foot, Edema                              |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 7  | 3.9 |
| Foot, Fibrosis                           | 3 | 4 | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   | 11 | 3.8 |
| Foot, Inflammation, Chronic Active       | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   | 11 | 3.9 |
| Foot, Necrosis                           |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   |   |   |   | 7  | 4.0 |
| Foot, Ulcer                              | 4 | 4 | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   |   |   |   | 9  | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|
|   | 04          | 07 | 04 | 06 | 07 | 07 | 07 | 06 | 04 | 06 | 05 | 06 | 06 | 05 | 06 | 04 | 04 | 06 | 07 | 07 |          | 05 | 05 | 05 |
| ANIMAL ID   | 05          | 05 | 05 | 05 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 08 | 08 | 08 | 08 | 08 | 08 | 08       | 09 | 09 | 09 |
|   | 00          | 00 | 00 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 09 | 09 | 09 | 09 | 09 | 09 | 09       | 09 | 09 | 09 |
|   | 07          | 08 | 08 | 09 | 09 | 02 | 02 | 03 | 03 | 04 | 04 | 05 | 05 | 06 | 06 | 06 | 07 | 08 | 08 | 09 | 09       | 00 | 00 |    |
|   | 02          | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 02       | 01 | 02 | 02 |

**MUSCULOSKELETAL SYSTEM**

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |    |
| Cranium, Fracture |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |    |
| Bone, Femur       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |    |

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |        |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|--------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50    |        |
| Compression               |   | 4 |   |   |   | 3 |   |   |   | 1 |   |   | 2 |   |   |   |   | 3 |   |   |   | 2  |       | 13 2.7 |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50    |        |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50    |        |
| Ventricle, Dilatation     |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 6 1.8 |        |
| Nerve Trigeminal          | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 11 |       |        |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4 1.0 |        |
| Peripheral Nerve, Sciatic | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 11 |       |        |
| Peripheral Nerve, Tibial  | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 11 |       |        |
| Spinal Cord, Cervical     | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10 |       |        |
| Spinal Cord, Lumbar       | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 10 |       |        |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4 2.3 |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

| DAY ON TEST                                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | 4 | 7 | 4 | 6 | 7 | 7 | 7 | 6 | 4 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 4 | 6 | 7 | 4 | 7 | 7 | 5 | 5 | 5 | 5 |   |          |
| <b>F1 2500.BPA F</b>                         | 8 | 2 | 7 | 4 | 2 | 2 | 2 | 3 | 9 | 1 | 9 | 7 | 8 | 6 | 0 | 8 | 3 | 9 | 3 | 2 | 2 | 8 | 5 | 6 | 8 | 2 |   |          |
| <b>ANIMAL ID</b>                             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |          |
|  | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 |   |          |
|  | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |   |          |
|  | 7 | 8 | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 0 | 0 |   |   |          |
|  | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 0 |   |          |

|                       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|-----------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| Spinal Cord, Thoracic | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
|-----------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|

**RESPIRATORY SYSTEM**

|                                   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |    |   |    |
|-----------------------------------|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|----|---|----|
| Lung                              | + | + | + | + | + |  | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |  |  |  | 44 |   |    |
| Congestion                        |   |   |   |   |   |  |   | 4 |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |    | 2 |    |
| Hemorrhage                        |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |    |   | 1  |
| Infiltration Cellular, Histiocyte |   |   |   | 1 |   |  | 1 |   |   | 2 |   |   |   | 3 | 2 | 1 |   |   |   |  |  |  |  |  |    |   | 10 |
| Metaplasia, Osseous               |   |   |   | 1 |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |    |   | 1  |
| Pigmentation                      |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |    |   | 1  |
| Alveolar Epithelium, Hyperplasia  |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   | 1 |   |   |  |  |  |  |  |    |   | 3  |

|  |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |    |   |
|--|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|--|--|--|--|----|---|
| Nose   | + | + | + | + |  | + | A | + | + | + | + | + | + | + | + | + | + | + |  |   |  |  |  |  |  | 38 |   |
| Inflammation, Chronic Active                           |   |   |   |   |  |   |   | 2 |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |    | 1 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |   |   |   |   |  |   |   |   |   | 2 | 4 |   |   | 3 |   |   |   |   |  | 1 |  |  |  |  |  |    | 7 |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |   |   |   |   |  |   |   | 3 |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |    | 1 |
| Transitional Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |    | 1 |

|         |   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |  |  |  |  |  |    |
|---------|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|----|
| Trachea | + | + | + | + |  | + | A | + | + | + | + | + | + | + | + | + | + | + |  |  |  |  |  |  |  |  | 37 |
|---------|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|----|

**SPECIAL SENSES SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |   |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |   |
|----------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Eye                  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Cataract             |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| Retina, Degeneration |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 2 |

|                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |   |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|---|
| Zymbal's Gland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |  |  |  | 2 |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04  
Test Type: CHRONIC  
Route: GAVAGE  
Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
Time Report Requested: 10:21:03  
First Dose M/F: 09/25/12 / 09/25/12  
Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.BPA F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |   |   |   |
|   | 4           | 7 | 4 | 6 | 7 | 7 | 7 | 6 | 4 | 6 | 5 | 6 | 6 | 5 | 6 | 4 | 4 | 6 | 7 | 4 | 7 | 7 |          | 5 | 5 | 5 |
| ANIMAL ID   | 8           | 0 | 1 | 5 | 9 | 5 | 6 | 3 | 9 | 1 | 9 | 7 | 8 | 6 | 0 | 8 | 3 | 9 | 3 | 2 | 5 | 2 | 2        | 9 | 0 | 8 |
| 0   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 |
| 5   | 5           | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8        | 8 | 9 | 9 |
| 0   | 0           | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9        | 9 | 0 | 0 |
| 7   | 8           | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9        | 0 | 0 |   |
| 2   | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1        | 2 | 1 | 2 |

### URINARY SYSTEM

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |
| Casts Protein                        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 6  | 1.2 |     |
| Mineralization                       |   |   | 1 | 2 | 1 | 1 |   |   | 1 |   | 1 |   | 2 | 2 | 1 |   |   | 1 | 1 |   |   |   | 2 | 2 | 1  | 24  | 1.4 |
| Nephropathy                          |   |   |   | 2 | 1 |   | 2 | 1 |   | 3 | 1 | 1 |   | 2 | 4 |   | 1 |   | 1 |   | 3 | 4 |   |   |    | 21  | 1.8 |
| Cortex, Cyst                         |   |   | X |   |   |   |   | X | X |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |    | 10  |     |
| Renal Tubule, Cyst                   |   |   |   |   |   |   |   |   |   | X |   | X |   | X | X |   | X |   |   |   |   |   |   |   |    | 12  |     |
| Transitional Epithelium, Hyperplasia |   |   |   | 1 | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   | 1 |   |    | 9   | 1.1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|
|   | 0686        | 0543 | 0527 | 0703 | 0694 | 0728 | 0526 | 0551 | 0553 | 0555 | 0493 | 0649 | 0762 | 0668 | 0733 | 0770 | 0772 | 0773 | 0576 | 0663 |           |                      | 0669 | 0570 | 0557 |
|   | 0089        | 0088 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0055 | 0055 | 0055      | 0055                 | 0055 | 0055 |      |
|   | 91          | 92   | 01   | 02   | 01   | 02   | 01   | 02   | 02   | 31   | 32   | 51   | 52   | 61   | 62   | 71   | 72   | 81   | 82   | 91   | 92        | 11                   | 12   | 21   |      |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + |   | + | + | + | + | + | + |
| Intestine Large, Colon                  | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + |   | + | + | + | + | + | + |
| Intestine Small, Ileum                  | + | + | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + |   | + | + | + | + | + | + |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   | 3 |   | 3 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   |   |   |
| Basophilic Focus                        |   |   |   | X | X |   |   | X |   | X |   | X | X | X | X |   |   |   | X |   |   |   |   |   |
| Clear Cell Focus                        |   |   |   |   | X |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                            | 4 |   |   | 1 |   | 3 | 2 | 3 |   |   |   |   | 2 |   |   | 2 | 2 |   |   | 2 |   |   |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 2 |   |   |   | 1 | 2 |   | 1 | 1 |   |   | 1 |   | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 |   |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                          |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Tension Lipidosis                       |   | 4 |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   | 3 |
| Vacuolization Cytoplasmic               |   |   |   |   | 2 |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |   | 1 | 2 |   | 2 | 1 |   |
| Bile Duct, Hyperplasia                  | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   | 2 | 1 |   | 4 |   |   |   |
| Biliary Tract, Fibrosis                 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 2 |   |   |   |
| Capsule, Fibrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Capsule, Inflammation, Chronic Active   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oval Cell, Hyperplasia                  | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Mesentery

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|   | 0686        | 0543 | 0527 | 0703 | 0694 | 0728 | 0522 | 0558 | 0553 | 0551 | 0493 | 0632 | 0762 | 0668 | 0733 | 0770 | 0772 | 0753 | 0666 | 0663 | 0577 | 0550 | 0772 | 0720 |           |                      |
|   | 0089        | 0088 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0099 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 00891     |                      |

Fat, Necrosis

Pancreas

Basophilic Focus

Infiltration Cellular, Lymphocyte

Inflammation, Chronic Active

Lipomatosis

Pigmentation

Acinus, Degeneration

Stomach, Forestomach

Ulcer

Epithelium, Hyperplasia

Stomach, Glandular

Mineralization

Polyarteritis

Epithelium, Hyperplasia

**CARDIOVASCULAR SYSTEM**

Blood Vessel

Mineralization

Heart

Cardiomyopathy

Inflammation, Chronic Active

Mineralization

Polyarteritis

Myocardium, Necrosis

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| DAY ON TEST                          |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |           | 6 | 5 | 5 | 7 | 6 | 7 | 5 | 5 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 6 | 6 | 5 | 5 | 7 |   |
|                                      |           | 8 | 4 | 2 | 0 | 9 | 2 | 2 | 8 | 3 | 1 | 9 | 3 | 2 | 8 | 3 | 2 | 0 | 2 | 3 | 6 | 3 | 7 | 7 |   |
|                                      |           | 6 | 3 | 7 | 3 | 4 | 8 | 6 | 1 | 3 | 8 | 4 | 9 | 2 | 6 | 8 | 3 | 7 | 6 | 1 | 0 | 9 | 0 | 0 |   |
| F1 25000BPA F                        | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                                      |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 |   |
|                                      |           | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 |   |
|                                      |           | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 |   |
|                                      |           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |   |

females  
(cont...)

ENDOCRINE SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Angiectasis                                 | 3 |   |   | 2 |   |   |   | 2 |   |   |   | 3 |   |   |   | 1 |   |   |   |   |   | 2 |   |   |   |
| Degeneration, Cystic                        | 4 |   | 1 | 2 | 3 | 4 |   |   |   |   |   | 2 | 4 | 3 | 2 | 4 | 4 |   | 2 | 2 | 3 | 1 | 2 | 3 | 2 |
| Hyperplasia                                 |   |   |   |   |   |   |   | 2 | 1 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Hypertrophy                                 |   |   | 1 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic Capsule, Fibrosis |   | 2 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Hyperplasia                                 |   |   | 1 |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Hyperplasia                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |
| Parathyroid Gland                           | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Hyperplasia                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1 |   |   |
| Pituitary Gland                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Angiectasis                                 | 4 |   |   | 4 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Hemorrhage                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Cyst                         |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia                  |   | 4 | 4 |   |   | 3 | 4 |   |   | 3 | 4 |   |   | 2 |   | 2 |   |   | 4 |   | 4 | 4 |   | 2 |   |
| Rathke's Cleft, Cyst                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |
| Angiectasis                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Infiltration Cellular, Lymphocyte           |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ultimobranchial Cyst                        | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   | X | X |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|--|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 25000BPA F</b> | DAY ON TEST | 0<br>6<br>8<br>6      | 0<br>5<br>4<br>3      | 0<br>5<br>2<br>7      | 0<br>7<br>0<br>3      | 0<br>6<br>9<br>4      | 0<br>7<br>2<br>8      | 0<br>5<br>2<br>6      | 0<br>5<br>8<br>1      | 0<br>5<br>3<br>3      | 0<br>5<br>1<br>8      | 0<br>4<br>9<br>4      | 0<br>6<br>3<br>2      | 0<br>7<br>2<br>8      | 0<br>6<br>3<br>2      | 0<br>7<br>0<br>7      | 0<br>7<br>2<br>6      | 0<br>5<br>3<br>1      | 0<br>6<br>6<br>0      | 0<br>6<br>3<br>9      | 0<br>5<br>7<br>0      | 0<br>5<br>7<br>0      | 0<br>7<br>2<br>0      |                       |                       |
|  | ANIMAL ID   | 0<br>0<br>8<br>9<br>1 | 0<br>0<br>8<br>9<br>2 | 0<br>0<br>9<br>0<br>1 | 0<br>0<br>9<br>1<br>1 | 0<br>0<br>9<br>2<br>2 | 0<br>0<br>9<br>2<br>1 | 0<br>0<br>9<br>2<br>2 | 0<br>0<br>9<br>3<br>1 | 0<br>0<br>9<br>3<br>2 | 0<br>3<br>9<br>5<br>1 | 0<br>3<br>0<br>5<br>2 | 0<br>3<br>0<br>6<br>1 | 0<br>3<br>0<br>7<br>1 | 0<br>3<br>0<br>7<br>2 | 0<br>3<br>0<br>7<br>1 | 0<br>3<br>0<br>8<br>2 | 0<br>3<br>0<br>8<br>1 | 0<br>3<br>2<br>9<br>1 | 0<br>3<br>2<br>9<br>2 | 0<br>5<br>2<br>1<br>2 | 0<br>5<br>2<br>1<br>2 | 0<br>5<br>2<br>2<br>1 | 0<br>5<br>2<br>2<br>2 | 0<br>5<br>2<br>2<br>1 |
|  |             |                       | 1                     | 3                     | 1                     | 2                     |                       | 2                     |                       | 1                     | 2                     | 2                     |                       | 2                     | 1                     |                       |                       |                       | 1                     |                       |                       |                       |                       | 1                     | 3                     |
| C-cell, Hyperplasia  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Follicular Cell, Hyperplasia                                   |             |                       |                       | 2                     |                       |                       |                       |                       |                       | 2                     |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |

**females (cont...)**

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperkeratosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Duct, Dilatation               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat Pad, Ovarian/parametrial   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ovary                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrophy                        | 4 | 4 | 4 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 | 4 | 2 | 4 | 2 |
| Cyst                           |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Sertoliform       | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Follicle, Cyst      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Bursa, Cyst                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Follicle, Cyst                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Interstitial Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   | X |   |   |
| Oviduct                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Uterus                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrophy                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |   |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|---|
|   | 0686        | 0543  | 0527  | 0703  | 0694  | 0728  | 0522  | 0558  | 0553  | 0551  | 0493  | 0632  | 0772  | 0668  | 0733  | 0770  | 0772  | 0573  | 0663  | 0570  |                      | 0550  | 0772  |   |
| ANIMAL ID   | 00891       | 00889 | 00001 | 00001 | 00001 | 00002 | 00001 | 00002 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00005 | 00005 | 00005                | 00005 | 00005 |   |
| Metaplasia, Squamous                                  | 1           | 3     | 1     |       |       | 1     |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Endometrial Glands, Hyperplasia                       |             | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |                      |       |       |   |
| Endometrium, Cyst                                     |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Endometrium, Hyperplasia                              | 1           |       |       |       |       |       |       |       | 2     | 3     |       | 2     |       | 2     |       |       |       |       | 2     |       |                      | 4     |       |   |
| Endometrium, Hyperplasia, Cystic Lumen, Dilatation    | 4           | 3     | 2     | 2     | 2     |       | 2     |       | 3     |       |       | 4     |       | 2     |       |       |       | 1     |       | 3     | 2                    | 3     | 2     | 3 |
| Vagina  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                    | +     | +     |   |
| Infiltration Cellular, Polymorphonuclear              |             |       |       |       |       |       |       |       |       | 2     |       |       |       | 4     |       | 2     |       |       | 3     |       |                      |       | 4     |   |
| Epithelium, Degeneration                              |             |       |       |       |       |       | 2     |       |       | 2     |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Epithelium, Hyperplasia                               |             | 4     | 3     |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |       | 2                    |       | 2     |   |
| Epithelium, Mucification                              | 2           |       |       | 4     | 4     | 4     | 4     | 3     | 4     | 2     | 4     | 3     | 4     | 2     | 2     | 4     | 4     | 2     | 4     | 4     | 4                    | 3     | 4     |   |
| Lumen, Dilatation                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| <b>HEMATOPOIETIC SYSTEM</b>                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Bone Marrow   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                    | +     | +     |   |
| Hypocellularity                                       |             |       |       | 3     | 4     | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Myeloid Cell, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Lymph Node  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | +                    |       | +     |   |
| Lumbar, Degeneration, Cystic                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Lumbar, Hyperplasia, Lymphoid                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |                      |       | 4     |   |
| Lumbar, Infiltration Cellular, Plasma Cell            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |                      |       | 4     |   |
| Renal, Infiltration Cellular, Plasma Cell             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |                      |       |       |   |
| Lymph Node, Mandibular                                |             |       |       |       |       |       |       |       |       |       | +     |       |       | +     |       |       |       |       |       |       | +                    |       |       |   |
| Degeneration, Cystic                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |   |
| Hyperplasia, Lymphoid                                 |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       | 4     |                      |       |       |   |
| Infiltration Cellular, Plasma Cell                    |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |                      |       |       |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |   |   |   |   |
|--|----------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|---|---|---|
|  |                      | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>females<br/>(cont...)</b> |   |   |   |   |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | <b>F1 25000BPA F</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                              | 0 |   |   |   |
|  |                      | 6           | 5 | 5 | 7 | 6 | 7 | 5 | 5 | 5 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 6 |                              | 6 | 5 | 5 | 7 |
|  |                      | 8           | 4 | 2 | 0 | 9 | 2 | 2 | 8 | 3 | 1 | 9 | 3 | 2 | 8 | 3 | 2 | 0 | 2 | 2 | 3 |                              | 6 | 3 | 7 | 7 |
|  |                      | 6           | 3 | 7 | 3 | 4 | 8 | 6 | 1 | 3 | 8 | 4 | 9 | 2 | 6 | 8 | 3 | 7 | 6 | 7 | 1 | 0                            | 9 | 0 | 0 |   |
|  |                      | ANIMAL ID   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |   |   |   |   |
|  |                      | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                            | 0 | 0 | 0 |   |
|  |                      | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5                            | 5 | 5 | 5 | 5 |
|  |                      | 8           | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2                            | 2 | 2 | 2 |   |
|  |                      | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1                            | 2 | 2 | 2 |   |
|  |                      | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2                            | 1 | 2 | 1 |   |

|                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Necrosis                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mesenteric           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hemorrhage                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigmentation                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**INTEGUMENTARY SYSTEM**

|                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mammary Gland                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atypical Focus                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lobular          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alveolus, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Skin                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ulcer                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium, Foot, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Bacterium               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Edema                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Foot, Fibrosis                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |       |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|-------|------|
|   | 0686        | 0543 | 0527 | 0703 | 0694 | 0728 | 0526 | 0551 | 0553 | 0555 | 0449 | 0663 | 0772 | 0668 | 0773 | 0777 | 0772 | 0726 | 0571 | 0660 |           |                      | 0663 | 0570 | 0550  | 0772 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    | 00891 |      |

Foot, Hyperkeratosis 4  
 Foot, Inflammation, Chronic Active 4 4 4 4  
 Foot, Necrosis 4 4 4  
 Foot, Ulcer 4 4 4 4

**MUSCULOSKELETAL SYSTEM**

Bone, Femur +  
 Fibrous Osteodystrophy  
 Skeletal Muscle

**NERVOUS SYSTEM**

Brain, Brain Stem +  
 Compression 4 4 3 1 3 3 1 4 4  
 Brain, Cerebellum +  
 Brain, Cerebrum +  
 Ventricle, Dilatation 1 2  
 Nerve Trigeminal Axon, Degeneration + + 1 1  
 Peripheral Nerve, Sciatic + +  
 Peripheral Nerve, Tibial + +  
 Spinal Cord, Cervical + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
 X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
 I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|
|  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 25000BPA F</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                              |
|  | 6           | 5 | 5 | 7 | 6 | 7 | 5 | 5 | 5 | 5 | 4 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 5 | 6 | 6 | 5 | 5 | 7 |                              |
|  | 8           | 4 | 2 | 0 | 9 | 2 | 2 | 8 | 3 | 1 | 9 | 3 | 2 | 8 | 3 | 2 | 0 | 2 | 2 | 3 | 6 | 3 | 7 | 7 | 2                            |
|  | 6           | 3 | 7 | 3 | 4 | 8 | 6 | 1 | 3 | 8 | 4 | 9 | 2 | 6 | 8 | 3 | 7 | 6 | 7 | 1 | 0 | 9 | 0 | 0 |                              |
|  | ANIMAL ID   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>females<br/>(cont...)</b> |
| 0  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                              |
| 0  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 |                              |
|  | 8           | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 |                              |
|  | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 |                              |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 |                              |

Axon, Degeneration

1

Spinal Cord, Lumbar  
 Axon, Degeneration

+

+ +  
 1

Spinal Cord, Thoracic  
 Axon, Degeneration

+

+ +  
 1

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X |   |   | X |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Osteodystrophy                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST | 0686  | 0543  | 0527  | 0703  | 0694  | 0728  | 0526  | 0551  | 0553  | 0558  | 0494  | 0669  | 0772  | 0668  | 0773  | 0777  | 0772  | 0722  | 0531  | 0660  | 0663  | 0570  | 0550  | 0772  | females<br>(cont...) |
|   | ANIMAL ID   | 00891 | 00890 | 00001 | 00002 | 00001 | 00002 | 00001 | 00002 | 00001 | 00002 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00003 | 00005 | 00005 | 00005 | 00005 | 00005 |                      |

SPECIAL SENSES SYSTEM

Zymbal's Gland  
Inflammation, Suppurative  
Thrombosis  
Duct, Dilatation

+

URINARY SYSTEM

Kidney

Accumulation, Hyaline Droplet

Casts Protein

Mineralization

Nephropathy

Polyarteritis

Capsule, Fibrosis

Capsule, Inflammation, Chronic Active

Cortex, Cyst

Renal Tubule, Cyst

Transitional Epithelium, Hyperplasia

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1 |   |   | 1 |   |   | 1 | 2 |   |   | 2 | 1 |   |   | 2 | 3 |   |   | 3 | 1 |   | 2 | 1 |   |   |
| 3 | 1 |   | 2 | 1 | 2 |   |   |   |   | 1 | 1 |   | 2 | 1 | 1 | 1 | 1 |   | 1 | 1 | 1 |   | 1 | 1 |
| X |   |   |   |   | X | X |   |   |   | X |   |   | X |   |   |   | X |   | X |   |   |   |   |   |
| X |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |
|   |   |   | 1 |   |   |   |   |   |   |   |   | 2 |   |   | 1 |   |   |   |   |   |   |   |   |   |

Urinary Bladder

+

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |  |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| ANIMAL ID   |             | 5 | 4 | 6 | 5 | 6 | 0 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 6 |  |
|   |             | 7 | 8 | 1 | 1 | 5 | 4 | 2 | 0 | 1 | 2 | 1 | 6 | 2 | 6 | 5 | 5 | 2 | 1 | 2 | 2 | 8 |  |
|   |             | 5 | 6 | 6 | 1 | 8 | 4 | 8 | 2 | 6 | 6 | 0 | 8 | 4 | 6 | 4 | 5 | 0 | 1 | 4 | 8 | 2 |  |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|   |             | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |  |
|   |             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |  |
|   |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 |  |
|   |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |  |
| <b>* TOTALS</b>                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Esophagus                               | + | + | + | + | + | + |   | + | + |   | + | + | + | + | + | + | + | + | + | + | + | <b>38</b>     |
| Intestine Large, Colon                  | + | + | + | + | + | + |   | + | + |   | + | + | + | + | + | + | + | + | + | + | + | <b>38</b>     |
| Intestine Small, Ileum                  | + | + | + | + | + | + |   | + | + |   | A | + | + | + | + | + | + | + | + | + | + | <b>37</b>     |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 | 1 |   | <b>8 2.0</b>  |
| Basophilic Focus                        | X |   |   |   |   |   |   | X | X |   |   |   |   | X | X | X | X |   | X |   |   | <b>18</b>     |
| Clear Cell Focus                        |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | <b>7</b>      |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Fatty Change                            |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 3 | 3 |   |   | <b>12 2.5</b> |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Hepatodiaphragmatic Nodule              |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | <b>2</b>      |
| Infiltration Cellular, Mononuclear Cell |   |   |   |   |   | 1 | 1 |   | 1 | 1 |   |   | 1 |   | 1 |   | 1 |   |   | 3 |   | <b>24 1.3</b> |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Mineralization                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b>  |
| Mixed Cell Focus                        | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>      |
| Tension Lipidosis                       |   |   |   | 2 | 2 |   |   |   | 1 |   |   |   |   |   |   |   | 4 |   | 4 |   |   | <b>10 3.2</b> |
| Vacuolization Cytoplasmic               | 1 |   |   | 1 |   |   |   |   | 1 | 1 |   | 2 |   |   |   |   |   |   | 1 |   | 1 | <b>15 1.3</b> |
| Bile Duct, Hyperplasia                  |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   | 1 |   |   |   |   | <b>9 1.7</b>  |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   | <b>5 1.2</b>  |
| Capsule, Fibrosis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | <b>1 4.0</b>  |
| Capsule, Inflammation, Chronic Active   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | <b>1 4.0</b>  |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 | 2 |   | <b>3 3.3</b>  |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 1.5</b>  |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   | + |   | + | <b>3</b>      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|   | 0575        | 0486  | 0611  | 0568  | 0074  | 0778  | 0072  | 0016  | 0770  | 0774  | 0456  | 0665  | 0655  | 0772  | 0771  | 0774  | 0772  | 0682  | 0682  |       |          |       |       |
| ANIMAL ID   | 05232       | 05241 | 05244 | 05251 | 05255 | 07271 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 09311 | 09311 | 09311 | 09311 | 09311 | 09311    | 09311 | 09311 |

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |    |     |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|----|-----|
| Fat, Necrosis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 3 | 2  | 3.5 |
| Pancreas                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 46 |     |
| Basophilic Focus                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 2  |     |
| Infiltration Cellular, Lymphocyte |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 29 | 1.6 |
| Inflammation, Chronic Active      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |   | 3  | 1.7 |
| Lipomatosis                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 7  | 2.9 |
| Pigmentation                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 8  | 1.3 |
| Acinus, Degeneration              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 3 | 36 | 2.2 |
| Stomach, Forestomach              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 39 |     |
| Ulcer                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 1  | 1.0 |
| Epithelium, Hyperplasia           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 3  | 3.0 |
| Stomach, Glandular                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 38 |     |
| Mineralization                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1  | 4.0 |
| Polyarteritis                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |   | 1  | 1.0 |
| Epithelium, Hyperplasia           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |   | 1  | 4.0 |

**CARDIOVASCULAR SYSTEM**

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |    |     |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|----|-----|
| Blood Vessel                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 46 |     |
| Mineralization               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1  | 4.0 |
| Heart                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 46 |     |
| Cardiomyopathy               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 33 | 1.4 |
| Inflammation, Chronic Active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   | 1  | 2.0 |
| Mineralization               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   | 4 | 1  | 4.0 |
| Polyarteritis                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |   | 1  | 1.0 |
| Myocardium, Necrosis         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |   | 1  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | ANIMAL ID   | 5 | 4 | 6 | 5 | 6 | 0 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 6 | 5 | 5 | 7 | 7 | 7 | 7 | 6 |
|   |             | 7 | 8 | 1 | 1 | 5 | 4 | 2 | 0 | 1 | 2 | 1 | 6 | 2 | 6 | 5 | 5 | 2 | 1 | 2 | 2 | 8 | 8 |
|   |             | 5 | 6 | 6 | 1 | 8 | 4 | 8 | 2 | 6 | 6 | 0 | 8 | 4 | 6 | 4 | 5 | 0 | 1 | 4 | 8 | 2 | 2 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|   |             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 |
|   |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |
| <b>* TOTALS</b>                                       |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Angiectasis                       |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 | <b>9 2.1</b>  |
| Degeneration, Cystic              |   |   | 1 | 2 | 4 | 3 |   | 2 |   |   | 4 | 4 | 1 |   | 2 |   | 3 | 2 |   | 2 | 2 |   | <b>31 2.6</b> |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | <b>5 1.6</b>  |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | <b>3 1.7</b>  |
| Vacuolization Cytoplasmic         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 | <b>4 2.5</b>  |
| Capsule, Fibrosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   | <b>1 2.0</b>  |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   | 2 | <b>4 2.3</b>  |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | <b>2 2.5</b>  |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>45</b>     |
| Hyperplasia                       |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 4 |   |   | 2 |   |   |   | 3 | <b>6 2.2</b>  |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Angiectasis                       |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   | 4 |   | 3 | 4 |   | <b>9 3.7</b>  |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | <b>1 4.0</b>  |
| Pars Distalis, Cyst               |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>      |
| Pars Distalis, Hyperplasia        |   | 3 | 4 | 3 |   | 4 |   | 2 |   |   | 3 | 3 | 2 | 2 |   | 1 | 4 |   |   |   |   |   | <b>23 3.1</b> |
| Rathke's Cleft, Cyst              |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | <b>2</b>      |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>     |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 4.0</b>  |
| Infiltration Cellular, Lymphocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 1.0</b>  |
| Ultimobranchial Cyst              |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | <b>7</b>      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0575        | 0486  | 0611  | 0518  | 0074  | 0778  | 0072  | 0016  | 0076  | 0070  | 0048  | 0056  | 0066  | 0055  | 0072  | 0077  | 0074  | 0072  | 0068  | 0062  |          |
| ANIMAL ID   | 05232       | 05244 | 05244 | 05255 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 07222 | 09331 | 09331 | 09331 | 09331 | 09331 |          |
| C-cell, Hyperplasia                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 17       |
| Follicular Cell, Hyperplasia                          | 3           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     |
|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|
| Clitoral Gland                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 13  |
| Hyperkeratosis                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3   |
| Inflammation, Suppurative      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4.0 |
| Inflammation, Chronic Active   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10  |
| Duct, Dilatation               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3.4 |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1   |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3.0 |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11  |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3.7 |
| Fat Pad, Ovarian/parametrial   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1   |
| Ovary                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 46  |
| Atrophy                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 46  |
| Cyst                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.7 |
| Hyperplasia, Sertoliform       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4   |
| Bilateral, Follicle, Cyst      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.5 |
| Bursa, Cyst                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1   |
| Follicle, Cyst                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2   |
| Interstitial Cell, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4   |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1   |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4.0 |
| Oviduct                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 46  |
| Uterus                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 46  |
| Atrophy                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6   |
|                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F             | DAY ON TEST                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |
|---|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|   | 0575                                  | 0481  | 0611  | 0515  | 0664  | 0707  | 0775  | 0777  | 0512  | 0712  | 0774  | 0545  | 0666  | 0655  | 0772  | 0777  | 0777  | 0777  | 0628  | 0628  |          |       |
| ANIMAL ID   | 05232                                 | 05441 | 05542 | 05551 | 05722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 | 07722 |          |       |
| Metaplasia, Squamous  | 2                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 6        | 1.5   |
| Endometrial Glands, Hyperplasia                                   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 2.0   |
| Endometrium, Cyst   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |       |
| Endometrium, Hyperplasia  | 1 4 2 2                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 12       | 2.3   |
| Endometrium, Hyperplasia, Cystic Lumen, Dilatation                | 2 3 3 2 2 4 2 2 4 2 2 4 3 3 2 2 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 26       | 2.4   |
| Vagina  | +                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 46       |       |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        | 6 2.8 |
| Epithelium, Hyperplasia   | 3 2 2 2 3 2                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 12       | 2.7   |
| Epithelium, Mucification  | 4 2 3 2 4 4 2 3 4 4 4 3 3 4 3 2 1 4 2 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 40       | 3.2   |
| Lumen, Dilatation   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 1 4.0 |
| <b>HEMATOPOIETIC SYSTEM</b>                                       |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |
| Bone Marrow   | +                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 46       |       |
| Hypocellularity   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 6 3.2 |
| Myeloid Cell, Hyperplasia   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 2 4.0 |
| Lymph Node  | +                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 6        |       |
| Lumbar, Degeneration, Cystic                                      |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 2 3.5 |
| Lumbar, Hyperplasia, Lymphoid                                     |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 5 3.0 |
| Lumbar, Infiltration Cellular, Plasma Cell                        |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 4 3.8 |
| Renal, Infiltration Cellular, Plasma Cell                         |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 1 4.0 |
| Lymph Node, Mandibular  | +                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 6        |       |
| Degeneration, Cystic  |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1 3.0 |
| Hyperplasia, Lymphoid   |                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3 4.0 |
| Infiltration Cellular, Plasma Cell                                | 4                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 4 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID       |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|
|   | 0575        | 0486 | 0611 | 0515 | 0644 | 0707 | 0775 | 0777 | 0512 | 0712 | 0716 | 0452 | 0566 | 0655 | 0772 | 0777 | 0772 | 0778 | 0668 | 0682 |                 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |                 |
|   | 5           | 4    | 6    | 5    | 6    | 0    | 7    | 7    | 5    | 7    | 7    | 4    | 5    | 6    | 6    | 5    | 5    | 7    | 7    | 7    |                 |
|   | 7           | 8    | 1    | 1    | 5    | 4    | 2    | 0    | 1    | 2    | 1    | 6    | 2    | 6    | 5    | 5    | 2    | 1    | 2    | 2    |                 |
|   | 5           | 6    | 6    | 1    | 8    | 4    | 8    | 2    | 6    | 6    | 0    | 8    | 4    | 6    | 4    | 5    | 0    | 1    | 4    | 8    |                 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |                 |
|   | 5           | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 9    | 9    | 9    | 9    | 9    | 9    |                 |
|   | 2           | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 1    | 1    | 1    | 1    | 1    |                 |
|   | 3           | 4    | 4    | 4    | 5    | 6    | 6    | 7    | 7    | 8    | 8    | 9    | 9    | 0    | 0    | 0    | 1    | 1    | 2    | 2    |                 |
|   | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    |                 |
|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | <b>* TOTALS</b> |

Necrosis 2 1 2.0

Lymph Node, Mesenteric Degeneration, Cyst Hemorrhage 2 1 4.0 1 2.0

Spleen Hematopoietic Cell Proliferation 46 23 2.6  
 Hyperplasia, Lymphoid 2 2.5  
 Pigmentation 2 2 3 2 2 4 3 1 2 3 4 30 2.4

Thymus Atrophy Cyst 45 44 3.9 2

**INTEGUMENTARY SYSTEM**

Mammary Gland Atypical Focus 46 3 1.7  
 Hyperplasia, Lobular 4 1 3 4 4 2 2 1 3 2 1 4 4 4 37 3.1  
 Alveolus, Dilatation 2 2 2 2 3 11 2.2  
 Duct, Dilatation 2 2 2 2 1 2 14 2.1

Skin Inflammation, Chronic Active Ulcer 17 1 2.0 1 3.0  
 Epithelium, Foot, Hyperplasia 4 4 4 4 4 4 4 4 15 4.0  
 Foot, Bacterium 1  
 Foot, Edema 4 4 4 3 4 4 3 4 11 3.6  
 Foot, Fibrosis 4 4 4 4 4 4 4 4 15 4.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                      |  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------------------|--|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST                          |  | 5               | 4 | 6 | 5 | 6 | 0 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 6 |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE |  | 7               | 8 | 1 | 1 | 5 | 4 | 2 | 0 | 1 | 2 | 1 | 6 | 2 | 6 | 5 | 5 | 2 | 1 | 2 | 2 | 8 |
| F1 25000BPA F                        |  | 5               | 6 | 6 | 1 | 8 | 4 | 8 | 2 | 6 | 6 | 0 | 8 | 4 | 6 | 4 | 5 | 0 | 1 | 4 | 8 | 2 |
|                                      |  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID                            |  | 5               | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|                                      |  | 2               | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                      |  | 3               | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 |
|                                      |  | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|                                      |  | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                    |   |   |   |  |   |  |   |   |  |   |  |  |  |   |  |  |   |  |  |  |  |               |
|------------------------------------|---|---|---|--|---|--|---|---|--|---|--|--|--|---|--|--|---|--|--|--|--|---------------|
| Foot, Hyperkeratosis               |   |   |   |  |   |  |   |   |  |   |  |  |  |   |  |  |   |  |  |  |  | <b>1 4.0</b>  |
| Foot, Inflammation, Chronic Active | 4 | 4 | 4 |  | 4 |  | 4 | 4 |  | 4 |  |  |  | 4 |  |  | 4 |  |  |  |  | <b>16 4.0</b> |
| Foot, Necrosis                     | 4 | 4 | 4 |  | 4 |  | 4 | 4 |  | 4 |  |  |  | 4 |  |  |   |  |  |  |  | <b>14 4.0</b> |
| Foot, Ulcer                        | 4 | 4 | 4 |  | 4 |  | 4 | 4 |  | 4 |  |  |  | 4 |  |  |   |  |  |  |  | <b>15 4.0</b> |

MUSCULOSKELETAL SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |              |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Bone, Femur            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>    |
| Fibrous Osteodystrophy |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   | <b>1 4.0</b> |
| Skeletal Muscle        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | <b>1</b>     |

NERVOUS SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |              |               |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---------------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>    |               |
| Compression               |   |   |   | 2 |   |   |   |   | 2 | 3 |   |   |   |   | 2 |   |   | 4 |   | 2 | 3 | 2            | <b>17 2.8</b> |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>    |               |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b>    |               |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |   |   | 1 | 1            | <b>6 1.3</b>  |
| Nerve Trigeminal          |   |   |   | + |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>6</b>     |               |
| Axon, Degeneration        |   |   |   | 1 |   | 1 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>5 1.2</b> |               |
| Peripheral Nerve, Sciatic |   |   |   | + |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>6</b>     |               |
| Peripheral Nerve, Tibial  |   |   |   | + |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>6</b>     |               |
| Spinal Cord, Cervical     |   |   |   | + |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>6</b>     |               |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000BPA F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|   | 0575        | 0486  | 0611  | 0518  | 0074  | 0778  | 0072  | 0516  | 0776  | 0070  | 0454  | 0666  | 0655  | 0772  | 0774  | 0778  | 0621  | 0724  | 0772  | 0668  |          |       |       |       |       |
| ANIMAL ID   | 05232       | 05241 | 05244 | 05251 | 05255 | 07271 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 07277 | 09231 | 09233 | 09211 | 09211 | 09211 | 09211    | 09211 | 09211 | 09211 | 09211 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     | 0     | 0     |

|   |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |
|---|--|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Axon, Degeneration                          |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1.0   |
| Spinal Cord, Lumbar<br>Axon, Degeneration   |  |  | + | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 | 4 1.3 |
| Spinal Cord, Thoracic<br>Axon, Degeneration |  |  | + | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 | 1 1.0 |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 | 3      |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 13 2.4 |
| Infiltration Cellular, Histiocyte                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 1.5  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |
| Mineralization  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | 2 3.0  |
| Fibrous Osteodystrophy                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 11 2.1 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.7  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 2.0  |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 2.3  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |                      | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | DAY ON TEST          | 5 | 4 | 6 | 5 | 6 | 0 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 6 |
|  |                      | 7 | 8 | 1 | 1 | 5 | 4 | 2 | 0 | 1 | 2 | 1 | 6 | 2 | 6 | 5 | 5 | 2 | 1 | 2 | 2 | 8 | 8 |
|  |                      | 5 | 6 | 6 | 1 | 8 | 4 | 8 | 2 | 6 | 6 | 0 | 8 | 4 | 6 | 4 | 5 | 0 | 1 | 4 | 8 | 2 | 2 |
|  | <b>F1 25000BPA F</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  | ANIMAL ID            | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |                      | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|  |                      | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |                      | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
|  |                      | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |
| <b>* TOTALS</b>                              |                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**SPECIAL SENSES SYSTEM**

|                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |       |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-------|
| Zymbal's Gland            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |       |
| Inflammation, Suppurative |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 1 4.0 |
| Thrombosis                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | 1     |
| Duct, Dilatation          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 1 4.0 |

**URINARY SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Kidney                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |
| Accumulation, Hyaline Droplet         |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Casts Protein                         |   |   | 2 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   | 2 |   |   | 6  | 1.7 |
| Mineralization                        |   |   | 2 |   |   | 1 | 1 |   | 1 | 1 | 1 |   |   |   | 4 | 1 | 1 | 1 |   | 2 | 1 | 2 | 26 | 1.5 |
| Nephropathy                           |   |   |   |   | 1 | 1 | 4 | 1 |   |   |   |   |   |   | 4 |   | 1 | 1 |   |   |   | 4 | 25 | 1.6 |
| Polyarteritis                         |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Capsule, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1  | 4.0 |
| Capsule, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 1  | 3.0 |
| Cortex, Cyst                          |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 9  |     |
| Renal Tubule, Cyst                    |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 6  |     |
| Transitional Epithelium, Hyperplasia  |   |   |   |   |   | 1 |   |   |   | 2 | 1 |   |   |   |   | 1 |   |   | 4 |   | 1 |   | 9  | 1.6 |
| Urinary Bladder                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|-------|
|   | 0673        | 0659  | 0666  | 0583  | 0559  | 0448  | 0772  | 0772  | 0772  | 0469  | 0664  | 0772  | 0448  | 0772  | 0446  | 0551  | 0442  | 0554  | 0440  | 0556  |                      | 0557  | 0725  | 0553  | 0667  |
| ANIMAL ID   | 01031       | 01122 | 01141 | 01142 | 01151 | 01152 | 01133 | 01133 | 01133 | 01133 | 01133 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01155 | 01177 | 01177 | 01177                | 01177 | 01199 | 01199 | 01199 |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0                    | 0     | 0     | 0     |       |
|   | 1           | 1     | 1     | 1     | 1     | 1     | 3     | 3     | 3     | 3     | 3     | 3     | 5     | 5     | 5     | 5     | 5     | 5     | 7     | 7     | 7                    | 7     | 9     | 9     | 9     |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 1     | 1     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3                    | 3     | 3     | 2     | 2     |
|   | 3           | 3     | 4     | 4     | 5     | 5     | 9     | 9     | 0     | 1     | 1     | 5     | 5     | 6     | 6     | 7     | 7     | 7     | 7     | 7     | 8                    | 8     | 1     | 1     | 2     |
|   | 1           | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1                    | 2     | 1     | 2     | 1     |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + | + | + | + | + |   |   |   | + | + | + |   |   | + | + | + | + | + | + | + |   | + | + |
| Intestine Large, Colon                  | + | + | + | + | + | + |   |   |   | + | + | + |   |   | + | + | + | + | + | + | + |   | + | + |
| Intestine Small, Ileum                  | + | + | + | + | + | + |   |   |   | + | + | + |   |   | + | + | + | + | + | + | + |   | + | + |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                        |   | X | X | X | X |   | X |   |   |   |   | X |   |   |   |   |   | X | X |   |   | X |   | X |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
| Degeneration, Cystic                    | 1 |   | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |
| Fatty Change                            |   | 3 |   |   |   |   |   |   | 2 |   | 2 | 2 |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 2 |   | 1 | 1 |   |   |   | 1 | 1 |   |   | 1 | 1 | 2 | 1 | 1 | 1 |   | 1 |   | 1 | 1 |   | 1 |
| Mitotic Alteration                      |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   | 4 |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic               | 1 |   |   | 1 |   | 2 | 1 |   |   |   | 2 |   |   |   | 1 |   |   | 2 |   | 1 |   |   | 1 | 1 |
| Bile Duct, Hyperplasia                  | 2 | 2 | 1 | 1 |   |   |   |   | 2 |   |   |   |   |   |   |   | 2 | 1 |   |   | 1 |   |   |   |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Biliary Tract, Fibrosis                 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 |   |   |   |   |   |
| Hepatocyte, Necrosis                    |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fat, Necrosis                           |   | + |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |
| Pancreas                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|
|   | 0673        | 0675 | 0678 | 0689 | 0651 | 0659 | 0648 | 0677 | 0677 | 0677 | 0644 | 0666 | 0677 | 0644 | 0677 | 0644 | 0655 | 0644 | 0655 | 0644 |           |                      | 0655 | 0677 | 0655 | 0666 | 0677 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    | 0    | 0    | 0    |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 5    | 5    | 5    | 5    | 5    | 5    | 7    | 7    | 7         | 7                    | 9    | 9    | 9    | 9    | 9    |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 2    | 2    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3         | 3                    | 3    | 3    | 3    | 3    | 3    |
|   | 3           | 3    | 4    | 4    | 5    | 5    | 9    | 9    | 0    | 1    | 1    | 5    | 5    | 6    | 6    | 7    | 7    | 7    | 7    | 8    | 8         | 8                    | 1    | 1    | 2    | 2    | 2    |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                    | 1    | 2    | 1    | 2    | 1    |

|  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|--|---|---|--|--|--|
| Basophilic Focus Infiltration Cellular, Lymphocyte | X |   |   |   |   |   | X |   |   | X |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |  |  |
| Lipomatosis  |   |   |   |   |   |   |   | 3 |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |  |  |
| Pigmentation                                       | 1 |   |   | 1 |   |   |   |   | 1 |   |   |   |  |   |   |   |   |   | 1 |   |   |   |  |   |   |  |  |  |
| Acinus, Degeneration                               | 4 |   | 3 | 2 | 1 | 2 |   | 2 | 1 | 3 | 2 | 2 |  | 4 | 1 | 1 | 2 |   | 2 | 2 | 2 | 2 |  |   |   |  |  |  |
| Stomach, Forestomach                               | + | + | + | + | + | + |   |   |   | + | + | + |  | + | + | + | + | + | + | + | + |   |  | + | + |  |  |  |
| Stomach, Glandular Edema                           | + | + | + | + | + | + |   |   |   | + | + | + |  | + | + | + | + | + | + | + | + |   |  | + | + |  |  |  |
| Inflammation, Chronic Active                       |   | 3 |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |  |  |
|  |   | 3 |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |  |  |  |

CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | 1 | 2 | 1 | 1 | 1 |   | 2 | 1 | 1 | 2 | 1 |   |   | 1 | 1 |   |   |   |   | 2 | 1 | 1 | 1 | 1 | 2 |   |   |

ENDOCRINE SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis               |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Degeneration, Cystic      | 4 |   |   |   | 2 |   | 3 | 2 | 2 | 1 | 3 |   |   | 2 |   | 2 |   |   | 4 | 1 |   | 2 |   |   |   |   |   |
| Hyperplasia               |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |
| Hypertrophy               |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vacuolization Cytoplasmic |   | 1 |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|   | 0673        | 0675 | 0678 | 0591 | 0598 | 0479 | 0772 | 0779 | 0772 | 0469 | 0664 | 0762 | 0478 | 0765 | 0461 | 0551 | 0444 | 0548 | 0488 | 0506 |           |                      | 0551 |

|                              |   |  |  |  |   |  |  |  |   |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
|------------------------------|---|--|--|--|---|--|--|--|---|--|---|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|
| Hyperplasia                  | 1   |  |  |  |   |  |  |  |   |  | 1 |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Islets, Pancreatic           | + |  |  |  |   |  |  |  |   |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Parathyroid Gland            | + |  |  |  |   |  |  |  |   |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Hyperplasia                  | 1   |  |  |  |   |  |  |  |   |  | 2 |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Pituitary Gland              | + |  |  |  |   |  |  |  |   |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Angiectasis                  | 4   |  |  |  |   |  |  |  | 4 |  |   |  | 4 |  |  |  |   |  |  |  | 4 |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Pars Distalis, Cyst          |   |  |  |  | X |  |  |  |   |  |   |  |   |  |  |  | X |  |  |  | X |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Pars Distalis, Hyperplasia   | 4   |  |  |  | 4 |  |  |  | 4 |  |   |  | 4 |  |  |  | 3 |  |  |  | 3 |  |  |  | 2 |  |  |  | 2 |  |  |  | 4 |  |  |  | 2 |  |  |  | 3 |  |  |  | 4 |  |  |  |
| Thyroid Gland                | + |  |  |  |   |  |  |  |   |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Ultimobranchial Cyst         | X   |  |  |  |   |  |  |  | X |  |   |  |   |  |  |  | X |  |  |  |   |  |  |  | X |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| C-cell, Hyperplasia          |   |  |  |  | 2 |  |  |  | 1 |  |   |  |   |  |  |  |   |  |  |  |   |  |  |  | 2 |  |  |  | 1 |  |  |  | 2 |  |  |  | 2 |  |  |  |   |  |  |  |   |  |  |  |
| Follicular Cell, Hyperplasia |   |  |  |  | 3 |  |  |  | 3 |  |   |  |   |  |  |  | 2 |  |  |  |   |  |  |  |   |  |  |  | 3 |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |

GENERAL BODY SYSTEM

|            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tissue NOS | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

GENITAL SYSTEM

|                           |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
|---------------------------|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|---|--|--|--|
| Clitoral Gland            |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Hyperkeratosis            |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Inflammation, Suppurative |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Duct, Dilatation          |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Ovary                     | + |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |
| Atrophy                   | 4   |  |  |  | 2 |  |  |  | 2 |  |  |  | 2 |  |  |  | 3 |  |  |  | 3 |  |  |  | 3 |  |  |  | 2 |  |  |  | 2 |  |  |  | 4 |  |  |  | 3 |  |  |  | 2 |  |  |  | 4 |  |  |  | 3 |  |  |  |
| Cyst                      |   |  |  |  |   |  |  |  | X |  |  |  |   |  |  |  | X |  |  |  |   |  |  |  |   |  |  |  | X |  |  |  |   |  |  |  | X |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |   |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|   | 0673        | 0675 | 0678 | 0679 | 0681 | 0684 | 0687 | 0689 | 0692 | 0695 | 0698 | 0701 | 0704 | 0707 | 0710 | 0713 | 0716 | 0719 | 0722 | 0725 | 0728 | 0731 | 0734 | 0737 |                      |
| ANIMAL ID   | 0100        | 0101 | 0102 | 0103 | 0104 | 0105 | 0106 | 0107 | 0108 | 0109 | 0110 | 0111 | 0112 | 0113 | 0114 | 0115 | 0116 | 0117 | 0118 | 0119 | 0120 | 0121 | 0122 | 0123 |                      |
| Hyperplasia, Sertoliform<br>Bursa, Cyst               |             | 3    |      |      |      | 1    |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |                      |
| Oviduct   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Uterus  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Atrophy   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Hemorrhage  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Hyperplasia, Stromal                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3    |                      |
| Infiltration Cellular, Polymorphonuclear              |             |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |                      |
| Metaplasia, Squamous                                  |             |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrial Glands, Hyperplasia                       |             |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Hyperplasia                              |             |      |      |      | 1    |      |      | 2    |      | 1    |      | 2    |      | 2    |      | 2    |      | 4    |      | 2    | 2    |      | 1    |      |                      |
| Endometrium, Hyperplasia, Cystic<br>Lumen, Dilatation | 3           | 2    | 2    |      | 3    | 1    |      | 2    |      | 4    |      | 2    |      | 4    |      | 3    | 2    |      | 3    | 2    |      | 4    | 2    |      |                      |
| Vagina  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Infiltration Cellular, Polymorphonuclear              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Epithelium, Degeneration                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Epithelium, Hyperplasia                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Epithelium, Mucification                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |

HEMATOPOIETIC SYSTEM

|                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|
|   | 0673        | 0675 | 0678 | 0589 | 0551 | 0549 | 0772 | 0772 | 0772 | 0469 | 0664 | 0762 | 0478 | 0772 | 0461 | 0551 | 0444 | 0545 | 0448 | 0550 |           |                      | 0555 | 0772 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 0    |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 5    | 5    | 5    | 5    | 5    | 5    | 7    | 7    | 7         | 7                    | 9    | 9    |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 2    | 2    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3         | 3                    | 2    | 2    |
|   | 3           | 3    | 4    | 4    | 5    | 5    | 9    | 9    | 0    | 0    | 1    | 1    | 5    | 5    | 6    | 6    | 7    | 7    | 7    | 7    | 8         | 8                    | 1    | 1    |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                    | 1    | 2    |

Lumbar, Infiltration Cellular, Plasma Cell  
 Mediastinal, Degeneration, Cystic  
 Mediastinal, Hemorrhage  
 Mediastinal, Hyperplasia, Lymphoid  
 Renal, Infiltration Cellular, Plasma Cell

4  
 4  
 4  
 3  
 4 4  
 4

Lymph Node, Mesenteric  
 Degeneration, Cystic  
 Hemorrhage  
 Hyperplasia, Lymphoid

+  
 3  
 4  
 4

Spleen  
 Hematopoietic Cell Proliferation  
 Pigmentation

+  
 2 2 3 1 1 2 1 4 2 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3  
 4 1 3 4 1 3 3 1 2 3 3 3 3 3 4 3 1 4 4 2

Thymus  
 Atrophy

+  
 3 4 4 4 4 4 4 4 4 4 4 4 4 3 3 4 4 3 4 4 3 4 4 4 4

INTEGUMENTARY SYSTEM

Mammary Gland  
 Atypical Focus  
 Hyperplasia, Lobular  
 Metaplasia, Osseous  
 Alveolus, Dilatation  
 Duct, Dilatation  
 Duct, Hyperplasia

+  
 1 2  
 2 4 4 4 2 4 4 2 4 2 4 4 2 3 3 4 2 1 3 3 4 2 4  
 2 2  
 3 3 2 2 2 2 2 3  
 3

Skin  
 Epithelium, Foot, Hyperplasia

+ + +  
 4 4 4

+ + + + +  
 4 4 4 4 4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |       |
|---|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|-------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F |  | 0673        | 0675  | 0678  | 0591  | 0592  | 0472  | 0477  | 0479  | 0472  | 0469  | 0461  | 0463  | 0474  | 0478  | 0465  | 0454  | 0458  | 0450  | 0456  | 0575  |                      | 0593  | 0666  | 0676  |
| ANIMAL ID   |  | 01031       | 01111 | 01111 | 01111 | 01111 | 01333 | 01333 | 01333 | 01333 | 01333 | 01555 | 01555 | 01555 | 01555 | 01555 | 01777 | 01777 | 01777 | 01777 | 01999 |                      | 01999 | 01999 | 01999 |

|                                    |  |   |  |  |  |  |  |   |  |  |  |  |  |   |   |  |  |  |   |   |  |  |   |  |
|------------------------------------|--|---|--|--|--|--|--|---|--|--|--|--|--|---|---|--|--|--|---|---|--|--|---|--|
| Foot, Bacterium                    |  |   |  |  |  |  |  |   |  |  |  |  |  | X |   |  |  |  |   |   |  |  |   |  |
| Foot, Edema                        |  | 4 |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 4 |  |  |  | 4 |   |  |  | 4 |  |
| Foot, Fibrosis                     |  | 4 |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 4 |  |  |  | 2 | 4 |  |  | 4 |  |
| Foot, Inflammation, Chronic Active |  | 4 |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 4 |  |  |  | 3 | 4 |  |  | 4 |  |
| Foot, Necrosis                     |  | 4 |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 4 |  |  |  |   | 4 |  |  | 4 |  |
| Foot, Ulcer                        |  | 4 |  |  |  |  |  | 4 |  |  |  |  |  | 4 | 4 |  |  |  | 3 | 4 |  |  | 4 |  |

**MUSCULOSKELETAL SYSTEM**

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression               |   |   |   |   | 2 |   |   |   | 1 | 3 |   | 4 |   |   |   |   |   |   |   | 3 |   |   |   | 1 |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| Nerve Trigeminal          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   | + |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 2 |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |
| Peripheral Nerve, Tibial  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |
| Spinal Cord, Cervical     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|
|   | 0673        | 0675 | 0678 | 0679 | 0671 | 0679 | 0672 | 0679 | 0672 | 0679 | 0675 | 0671 | 0675 | 0673 | 0679 | 0676 | 0674 | 0675 | 0674 | 0675 |                      | 0675 | 0677 | 0675 | 0676 |
| ANIMAL ID   | 010         | 011  | 011  | 011  | 011  | 013  | 013  | 013  | 013  | 013  | 013  | 013  | 013  | 015  | 015  | 015  | 015  | 015  | 017  | 017  | 017                  | 017  | 017  | 019  | 019  |

Spinal Cord, Lumbar  
Axon, Degeneration

+  
2

Spinal Cord, Thoracic

+ + +

RESPIRATORY SYSTEM

Lung  
Hemorrhage  
Infiltration Cellular, Histiocyte  
Inflammation, Granulomatous  
Metaplasia, Osseous  
Alveolar Epithelium, Hyperplasia

+  
4  
4 1 3 1  
1 2

Nose  
Olfactory Epithelium, Accumulation, Hyaline  
Droplet

+  
2 2 1

Trachea

+ +

SPECIAL SENSES SYSTEM

Zymbal's Gland  
Abscess

+  
4

URINARY SYSTEM

Kidney  
Angiectasis  
Casts Protein

+  
3  
1 1

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| DAY ON TEST   | 6 | 6 | 6 | 5 | 5 | 4 | 7 | 7 | 7 | 4 | 6 | 6 | 7 | 4 | 7 | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 | 5 | 7 | 5 | 6 | 6 | 6 | females<br>(cont...) |   |
|   | 7 | 5 | 8 | 9 | 1 | 9 | 2 | 2 | 2 | 9 | 1 | 4 | 2 | 8 | 2 | 6 | 1 | 4 | 8 | 8 | 0 | 5 | 5 | 2 | 3 | 6 | 6 | 7 |   |                      |   |
| ANIMAL ID   | 3 | 9 | 6 | 3 | 8 | 8 | 9 | 9 | 5 | 1 | 5 | 3 | 9 | 6 | 5 | 1 | 2 | 4 | 0 | 5 | 6 | 1 | 5 | 2 | 3 | 7 | 6 | 7 |   |                      |   |
|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |   |
| Cyst  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Mineralization  | 2 |   |   |   | 1 |   | 2 |   |   |   | 2 |   |   | 3 |   | 2 |   | 1 |   |   | 1 |   | 1 |   |   |   |   |   |   |                      |   |
| Nephropathy   | 1 | 3 |   | 1 | 1 |   | 1 |   |   | 2 |   | 2 |   | 1 | 1 | 2 |   | 1 |   | 1 |   |   |   |   |   |   |   |   | 1 |                      |   |
| Cortex, Cyst  |   |   | X |   |   |   |   |   |   |   |   | X | X |   |   | X | X |   | X |   |   |   |   |   |   |   |   |   |   |                      |   |
| Pelvis, Dilatation                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Renal Tubule, Cyst                                    |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Renal Tubule, Dilatation                              | X |   | X |   | X |   | 2 |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |                      |   |
| Transitional Epithelium, Hyperplasia                  |   |   |   |   | 1 |   |   |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |                      |   |
| Urinary Bladder Hemorrhage                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      | + |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      | 3 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |   |                 |
|---|-------------|---|-----------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F | DAY ON TEST | 0 |                 |
|   |             | 7 |                 |
|   |             | 2 |                 |
|   |             | 9 |                 |
|   | ANIMAL ID   | 0 |                 |
|   |             | 9 |                 |
|   |             | 2 |                 |
|   |             | 2 |                 |
|   |             | 2 | <b>* TOTALS</b> |

ALIMENTARY SYSTEM

|   |   |  |  |    |     |
|---|---|--|--|----|-----|
| Esophagus                               |   |  |  |    | 19  |
| Intestine Large, Colon                  |   |  |  |    | 19  |
| Intestine Small, Ileum                  |   |  |  |    | 19  |
| Liver                                   | + |  |  |    | 26  |
| Angiectasis                             |   |  |  | 1  | 2.0 |
| Basophilic Focus                        | X |  |  | 12 |     |
| Clear Cell Focus                        |   |  |  | 2  |     |
| Degeneration, Cystic                    |   |  |  | 4  | 1.0 |
| Fatty Change                            |   |  |  | 5  | 2.2 |
| Hematopoietic Cell Proliferation        |   |  |  | 2  | 1.0 |
| Infiltration Cellular, Mononuclear Cell | 1 |  |  | 17 | 1.1 |
| Mitotic Alteration                      |   |  |  | 1  | 2.0 |
| Mixed Cell Focus                        |   |  |  | 1  |     |
| Tension Lipidosis                       |   |  |  | 2  | 3.5 |
| Vacuolization Cytoplasmic               | 1 |  |  | 11 | 1.3 |
| Bile Duct, Hyperplasia                  |   |  |  | 8  | 1.5 |
| Biliary Tract, Cyst                     | X |  |  | 2  |     |
| Biliary Tract, Fibrosis                 |   |  |  | 3  | 1.0 |
| Hepatocyte, Necrosis                    |   |  |  | 1  | 2.0 |
| Oval Cell, Hyperplasia                  |   |  |  | 1  | 1.0 |
| Mesentery                               |   |  |  |    | 2   |
| Fat, Necrosis                           |   |  |  | 1  | 4.0 |
| Pancreas                                | + |  |  |    | 26  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.05 EE2 F</b> | DAY ON TEST | 0 |                 |
|  |             | 7 |                 |
|  |             | 2 |                 |
|  |             | 9 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 2 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                                   |  |    |     |
|-----------------------------------|--|----|-----|
| Basophilic Focus                  |  | 3  |     |
| Infiltration Cellular, Lymphocyte |  | 18 | 1.3 |
| Lipomatosis                       |  | 1  | 3.0 |
| Pigmentation                      |  | 4  | 1.0 |
| Acinus, Degeneration              |  | 18 | 2.1 |

Stomach, Forestomach 19

|                              |  |    |     |
|------------------------------|--|----|-----|
| Stomach, Glandular           |  | 19 |     |
| Edema                        |  | 1  | 3.0 |
| Inflammation, Chronic Active |  | 1  | 3.0 |

**CARDIOVASCULAR SYSTEM**

|                |   |    |     |
|----------------|---|----|-----|
| Blood Vessel   | + | 26 |     |
| Heart          | + | 26 |     |
| Cardiomyopathy | 1 | 19 | 1.3 |

**ENDOCRINE SYSTEM**

|                           |   |    |     |
|---------------------------|---|----|-----|
| Adrenal Cortex            | + | 26 |     |
| Angiectasis               |   | 3  | 2.0 |
| Degeneration, Cystic      | 3 | 13 | 2.4 |
| Hyperplasia               |   | 4  | 1.8 |
| Hypertrophy               |   | 1  | 4.0 |
| Necrosis                  |   | 1  | 4.0 |
| Vacuolization Cytoplasmic |   | 3  | 3.0 |
| Adrenal Medulla           | + | 26 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F |   | DAY ON TEST |                 |     |
|---|---|-------------|-----------------|-----|
|   |   | ANIMAL ID   |                 |     |
|   |   | 0           |                 |     |
|   |   | 7           |                 |     |
|   |   | 2           |                 |     |
|   |   | 9           |                 |     |
|   |   | 0           |                 |     |
|   |   | 9           |                 |     |
|   |   | 2           |                 |     |
|   |   | 2           |                 |     |
|   |   | 2           |                 |     |
|   |   |             | <b>* TOTALS</b> |     |
| Hyperplasia   |   |             | 2               | 1.0 |
| Islets, Pancreatic                                    | + |             | 26              |     |
| Parathyroid Gland                                     | + |             | 26              |     |
| Hyperplasia   |   |             | 3               | 1.7 |
| Pituitary Gland                                       | + |             | 26              |     |
| Angiectasis   |   |             | 5               | 4.0 |
| Pars Distalis, Cyst                                   |   |             | 3               |     |
| Pars Distalis, Hyperplasia                            | 3 |             | 16              | 3.3 |
| Thyroid Gland   | + |             | 26              |     |
| Ultimobranchial Cyst                                  |   |             | 5               |     |
| C-cell, Hyperplasia                                   |   |             | 7               | 1.7 |
| Follicular Cell, Hyperplasia                          |   |             | 4               | 2.8 |
| <b>GENERAL BODY SYSTEM</b>                            |   |             |                 |     |
| Tissue NOS  |   |             | 2               |     |
| <b>GENITAL SYSTEM</b>                                 |   |             |                 |     |
| Clitoral Gland  | + |             | 2               |     |
| Hyperkeratosis  |   |             | 1               | 4.0 |
| Inflammation, Suppurative                             | 4 |             | 1               | 4.0 |
| Duct, Dilatation                                      | 4 |             | 2               | 4.0 |
| Ovary   | + |             | 26              |     |
| Atrophy   | 2 |             | 25              | 2.8 |
| Cyst  | X |             | 5               |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F |   | DAY ON TEST |                 |     |
|---|---|-------------|-----------------|-----|
|   |   | ANIMAL ID   |                 |     |
|   |   | 0           |                 |     |
|   |   | 7           |                 |     |
|   |   | 2           |                 |     |
|   |   | 9           |                 |     |
|   |   | 0           |                 |     |
|   |   | 9           |                 |     |
|   |   | 2           |                 |     |
|   |   | 2           |                 |     |
|   |   | 2           |                 |     |
|   |   |             | <b>* TOTALS</b> |     |
| Hyperplasia, Sertoliform                              |   |             | 3               | 2.0 |
| Bursa, Cyst   |   |             | 1               |     |
| Oviduct   | + |             | 26              |     |
| Uterus  | + |             | 26              |     |
| Atrophy   | 3 |             | 1               | 3.0 |
| Hemorrhage  |   |             | 1               | 2.0 |
| Hyperplasia, Stromal                                  |   |             | 1               | 3.0 |
| Infiltration Cellular, Polymorphonuclear              |   |             | 1               | 2.0 |
| Metaplasia, Squamous                                  |   |             | 2               | 2.0 |
| Endometrial Glands, Hyperplasia                       |   |             | 2               | 2.0 |
| Endometrium, Hyperplasia                              |   |             | 10              | 1.9 |
| Endometrium, Hyperplasia, Cystic                      |   |             | 14              | 2.5 |
| Lumen, Dilatation                                     |   |             | 2               | 4.0 |
| Vagina  | + |             | 26              |     |
| Infiltration Cellular, Polymorphonuclear              |   |             | 3               | 2.3 |
| Epithelium, Degeneration                              |   |             | 1               | 4.0 |
| Epithelium, Hyperplasia                               |   |             | 5               | 3.2 |
| Epithelium, Mucification                              | 3 |             | 21              | 3.4 |
| <b>HEMATOPOIETIC SYSTEM</b>                           |   |             |                 |     |
| Bone Marrow   | + |             | 26              |     |
| Hypocellularity                                       |   |             | 1               | 3.0 |
| Lymph Node  |   |             | 4               |     |
| Lumbar, Degeneration, Cystic                          |   |             | 4               | 3.0 |
| Lumbar, Hyperplasia, Lymphoid                         |   |             | 4               | 3.5 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | DAY ON TEST | 0 |                 |
|  |             | 7 |                 |
|  |             | 2 |                 |
|  |             | 9 |                 |
| <b>F1 0.05 EE2 F</b>                         | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|  |  |   |     |
|--|--|---|-----|
| Lumbar, Infiltration Cellular, Plasma Cell |  | 4 | 4.0 |
| Mediastinal, Degeneration, Cystic          |  | 1 | 4.0 |
| Mediastinal, Hemorrhage                    |  | 1 | 4.0 |
| Mediastinal, Hyperplasia, Lymphoid         |  | 1 | 3.0 |
| Renal, Infiltration Cellular, Plasma Cell  |  | 1 | 4.0 |

|                        |  |   |     |
|------------------------|--|---|-----|
| Lymph Node, Mesenteric |  | 1 |     |
| Degeneration, Cystic   |  | 1 | 3.0 |
| Hemorrhage             |  | 1 | 4.0 |
| Hyperplasia, Lymphoid  |  | 1 | 4.0 |

|                                  |   |    |     |
|----------------------------------|---|----|-----|
| Spleen                           | + | 26 |     |
| Hematopoietic Cell Proliferation |   | 15 | 2.1 |
| Pigmentation                     | 2 | 19 | 2.7 |

|         |   |    |     |
|---------|---|----|-----|
| Thymus  | + | 26 |     |
| Atrophy | 4 | 26 | 3.8 |

**INTEGUMENTARY SYSTEM**

|                      |   |    |     |
|----------------------|---|----|-----|
| Mammary Gland        | + | 26 |     |
| Atypical Focus       |   | 2  | 1.5 |
| Hyperplasia, Lobular | 2 | 24 | 3.0 |
| Metaplasia, Osseous  |   | 1  | 2.0 |
| Alveolus, Dilatation |   | 5  | 2.0 |
| Duct, Dilatation     |   | 6  | 2.5 |
| Duct, Hyperplasia    |   | 1  | 3.0 |

|                               |   |   |     |
|-------------------------------|---|---|-----|
| Skin                          | + | 9 |     |
| Epithelium, Foot, Hyperplasia | 4 | 7 | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.05 EE2 F</b> | DAY ON TEST | 0 |                 |
|  |             | 7 |                 |
|  |             | 2 |                 |
|  |             | 9 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 2 |                 |
|  |             | 2 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

|                                    |   |       |
|------------------------------------|---|-------|
| Foot, Bacterium                    |   | 1     |
| Foot, Edema                        | 4 | 7 4.0 |
| Foot, Fibrosis                     | 4 | 8 3.8 |
| Foot, Inflammation, Chronic Active | 4 | 8 3.9 |
| Foot, Necrosis                     | 4 | 7 4.0 |
| Foot, Ulcer                        | 4 | 8 3.9 |

**MUSCULOSKELETAL SYSTEM**

|             |   |    |
|-------------|---|----|
| Bone, Femur | + | 26 |
|-------------|---|----|

**NERVOUS SYSTEM**

|                           |   |    |       |
|---------------------------|---|----|-------|
| Brain, Brain Stem         | + | 26 |       |
| Compression               |   |    | 6 2.3 |
| Hemorrhage                |   |    | 1 2.0 |
| Brain, Cerebellum         | + | 26 |       |
| Brain, Cerebrum           | + | 26 |       |
| Ventricle, Dilatation     |   |    | 2 1.0 |
| Nerve Trigeminal          | + | 5  |       |
| Axon, Degeneration        | 1 |    | 3 1.7 |
| Peripheral Nerve, Sciatic | + | 5  |       |
| Peripheral Nerve, Tibial  | + | 5  |       |
| Spinal Cord, Cervical     | + | 5  |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |  |                 |
|--|-------------|---|--|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.05 EE2 F</b> | DAY ON TEST | 0 |  |                 |
|  |             | 7 |  |                 |
|  |             | 2 |  |                 |
|  |             | 9 |  |                 |
|  | ANIMAL ID   | 0 |  |                 |
|  |             | 9 |  |                 |
|  |             | 2 |  |                 |
|  |             | 2 |  |                 |
|  |             | 2 |  |                 |
|  |             |   |  | <b>* TOTALS</b> |

|                       |   |  |  |              |
|-----------------------|---|--|--|--------------|
| Spinal Cord, Lumbar   | + |  |  | <b>5</b>     |
| Axon, Degeneration    | 1 |  |  | <b>4 1.3</b> |
| Spinal Cord, Thoracic | + |  |  | <b>5</b>     |

**RESPIRATORY SYSTEM**

|   |  |  |  |              |
|---|--|--|--|--------------|
| Lung  |  |  |  | <b>21</b>    |
| Hemorrhage  |  |  |  | <b>1 4.0</b> |
| Infiltration Cellular, Histiocyte                   |  |  |  | <b>4 2.3</b> |
| Inflammation, Granulomatous                         |  |  |  | <b>1 3.0</b> |
| Metaplasia, Osseous                                 |  |  |  | <b>1 1.0</b> |
| Alveolar Epithelium, Hyperplasia                    |  |  |  | <b>1 2.0</b> |
| Nose  |  |  |  | <b>19</b>    |
| Olfactory Epithelium, Accumulation, Hyaline Droplet |  |  |  | <b>3 1.7</b> |
| Trachea   |  |  |  | <b>19</b>    |

**SPECIAL SENSES SYSTEM**

|                |  |  |  |              |
|----------------|--|--|--|--------------|
| Zymbal's Gland |  |  |  | <b>1</b>     |
| Abscess        |  |  |  | <b>1 4.0</b> |

**URINARY SYSTEM**

|               |   |  |  |              |
|---------------|---|--|--|--------------|
| Kidney        | + |  |  | <b>26</b>    |
| Angiectasis   |   |  |  | <b>1 3.0</b> |
| Casts Protein | 1 |  |  | <b>3 1.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.05 EE2 F |   | DAY ON TEST |    |                 |
|---|---|-------------|----|-----------------|
|   |   | ANIMAL ID   |    |                 |
|   |   | 0           |    |                 |
|   |   | 7           |    |                 |
|   |   | 2           |    |                 |
|   |   | 9           |    |                 |
|   |   | 0           |    |                 |
|   |   | 9           |    |                 |
|   |   | 2           |    |                 |
|   |   | 2           |    |                 |
|   |   | 2           |    |                 |
|   |   |             |    | <b>* TOTALS</b> |
| Cyst  |   |             | 1  |                 |
| Mineralization  | 2 |             | 10 | 1.7             |
| Nephropathy   |   |             | 14 | 1.4             |
| Cortex, Cyst  |   |             | 7  |                 |
| Pelvis, Dilatation                                    |   |             | 1  | 3.0             |
| Renal Tubule, Cyst                                    |   |             | 5  |                 |
| Renal Tubule, Dilatation                              |   |             | 1  | 2.0             |
| Transitional Epithelium, Hyperplasia                  | 2 |             | 5  | 1.4             |
| Urinary Bladder                                       |   |             | 1  |                 |
| Hemorrhage  |   |             | 1  | 3.0             |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST | 0712 | 0632 | 0530 | 0559 | 0488 | 0583 | 0552 | 0617 | 0742 | 0545 | 0555 | 0666 | 0579 | 0752 | 0773 | 0448 | 0557 | 0554 | 0772 | 0671 | 0363 |      |      |      |
|   | ANIMAL ID   | 0111 | 0111 | 0111 | 0111 | 0111 | 0133 | 0133 | 0133 | 0133 | 0133 | 0133 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0159 | 0159 | 0199 | 0199 |
|   |             | 51   | 52   | 61   | 62   | 71   | 72   | 73   | 74   | 75   | 76   | 77   | 78   | 79   | 80   | 81   | 82   | 83   | 84   | 85   | 86   | 87   | 91   | 92   | 93   |

females  
(cont...)

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |
| Intestine Large, Colon   | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |
| Intestine Small, Duodenum<br>Fibrosis  |   |   |   |   |   |   |   |   | + | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum   | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | A |   |   |
| Intestine Small, Jejunum<br>Dilatation<br>Fibrosis<br>Inflammation, Chronic Active<br>Metaplasia, Osseous<br>Epithelium, Hyperplasia |   |   |   |   |   |   |   |   | + |   |   |   | + |   | 4 |   | 4 |   | 4 |   | 3 |   | 4 |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus   |   | X | X |   | X | X | X | X |   | X |   |   | X |   | X | X |   | X | X |   |   |   |   |
| Clear Cell Focus   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Deformity  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic   | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change   | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell  |   | 1 |   |   |   | 1 |   |   | 2 |   |   |   | 1 |   | 1 | 1 | 1 |   | 1 | 1 | 1 |   | 2 |
| Mineralization   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| Mixed Cell Focus   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis  | 4 |   |   |   | 3 |   |   | 3 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Vacuolization Cytoplasmic  | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 3 | 1 | 1 |   | 1 |   |   | 1 |
| Bile Duct, Hyperplasia   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|   | 0712        | 0632 | 0530 | 0550 | 0489 | 0583 | 0556 | 0671 | 0742 | 0555 | 0555 | 0663 | 0556 | 0773 | 0578 | 0575 | 0771 | 0773 | 0487 | 0552 | 0554 | 0772 | 0671 | 0678 |           |                      | 0361 |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         |                      |      |
|   | 1           | 3    | 3    | 9    | 8    | 8    | 2    | 1    | 2    | 6    | 9    | 2    | 3    | 3    | 9    | 2    | 5    | 1    | 3    | 8    | 7    | 4    | 2    | 7    | 6         | 1                    |      |
|   | 2           | 2    | 0    | 0    | 9    | 3    | 6    | 7    | 6    | 3    | 8    | 8    | 0    | 8    | 8    | 3    | 7    | 0    | 7    | 4    | 5    | 2    | 1    | 8    | 1         |                      |      |
|   | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    |      |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 5    | 5    | 5    | 5    | 5    | 7    | 7    | 7    | 7    | 7    | 9    | 9    | 9         | 9                    |      |
|   | 1           | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 2    | 2    | 3    | 3         | 3                    |      |
|   | 5           | 5    | 6    | 6    | 7    | 7    | 1    | 1    | 2    | 2    | 3    | 7    | 7    | 8    | 8    | 9    | 9    | 5    | 5    | 6    | 6    | 9    | 9    | 9    | 0         | 0                    |      |
|   | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 1                    |      |

Capsule, Fibrosis

2

Mesentery

+

Fat, Inflammation, Granulomatous

4

Fat, Necrosis

4

Pancreas

+ +

Infiltration Cellular, Lymphocyte

3 2 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3

Inflammation, Chronic Active

2

Pigmentation

1 2 1

Acinar Cell, Hyperplasia

4 4

Acinus, Degeneration

1 2 4 1 2 2 3 1 1 2 1 1 2 1 1 2 2 4

Stomach, Forestomach

+ +

Stomach, Glandular

+ A

Tongue

+

Ulcer

3

CARDIOVASCULAR SYSTEM

Blood Vessel

+ +

Heart

+ +

Cardiomyopathy

1 1 1 2 2 1 2 3 2 2 1 1 2 2 2 1 1 1 1 1 1 1 2 1

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Angiectasis

2 3 4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|
|   | 0712        | 0632 | 0530 | 0550 | 0489 | 0583 | 0556 | 0617 | 0746 | 0553 | 0553 | 0663 | 0792 | 0533 | 0638 | 0758 | 0773 | 0487 | 0552 | 0557 |           |                      | 0674 | 0551 | 0772 |
| Degeneration, Cystic Fibrosis                         | 4           | 4    |      | 4    | 1    | 1    |      | 4    | 4    | 2    | 2    |      | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 2    | 4         | 2                    | 4    | 1    |      |
| Hemorrhage  |             |      |      |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |           |                      |      |      |      |
| Hyperplasia   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |           |                      |      |      |      |
| Hypertrophy   |             |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |           |                      |      | 2    |      |
| Metaplasia, Osseous                                   | 3           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Pigmentation  |             |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      | 3         |                      |      |      |      |
| Vacuolization Cytoplasmic                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         |                      |      |      |      |
| Adrenal Medulla                                       | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Hyperplasia   | 1           |      |      |      |      | 1    |      |      | 1    |      |      | 2    |      |      |      | 2    |      |      | 1    |      | 2         | 2                    |      |      |      |
| Islets, Pancreatic                                    | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Parathyroid Gland                                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Hyperplasia   |             |      |      |      |      |      |      |      |      |      | 1    |      |      |      | 2    |      |      |      |      |      |           |                      |      |      |      |
| Pituitary Gland                                       | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Angiectasis   | 4           | 4    |      |      | 4    | 4    | 4    | 4    |      |      | 4    |      |      | 4    |      |      | 4    |      | 4    | 4    | 4         | 4                    | 4    | 4    | 4    |
| Hemorrhage  |             |      | 4    |      |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |           |                      |      | 4    |      |
| Pars Distalis, Cyst                                   |             |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      | X    |      |           |                      |      |      |      |
| Pars Distalis, Hyperplasia                            |             |      |      |      | 4    |      |      |      | 4    |      |      |      |      |      | 3    | 3    | 4    | 2    |      |      |           |                      |      |      |      |
| Thyroid Gland   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    |      |
| Ultimobranchial Cyst                                  | X           | X    |      |      |      |      |      |      | X    |      |      | X    |      | X    |      |      |      | X    |      |      |           |                      |      | X    |      |
| C-cell, Hyperplasia                                   |             |      |      | 1    | 1    | 1    |      | 4    | 2    |      | 2    |      |      | 1    |      |      |      |      |      |      | 1         | 1                    |      |      |      |

GENERAL BODY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|
|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |   |                              |
|  |  | 7           | 6 | 5 | 5 | 4 | 5 | 5 | 6 | 7 | 4 | 5 | 5 | 5 | 6 | 5 | 7 | 5 | 7 | 7 | 4 | 5 | 5 | 7 | 6 | 3 |                              |
|  |  | 1           | 3 | 3 | 9 | 8 | 8 | 2 | 1 | 2 | 6 | 9 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 7 | 4 | 2 | 7 | 6 | 1                            |
| <b>F1 0.50 EE2 F</b>                         |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                              |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 |                              |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 3 |                              |
|  |  | 5           | 5 | 6 | 6 | 7 | 7 | 1 | 1 | 2 | 2 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 5 | 5 | 6 | 6 | 9 | 9 | 9 | 9 |                              |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 0 | 1 |                              |
|  |  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>females<br/>(cont...)</b> |

GENITAL SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Sertoliform                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bursa, Cyst                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Follicle, Cyst                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Granulosa Cell, Hyperplasia              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oviduct                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metaplasia, Squamous                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrial Glands, Hyperplasia          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Cyst                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia, Cystic         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumen, Dilatation                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vagina                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium, Degeneration                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium, Hyperplasia                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |                       |                       |                       |                       |   |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---|
|   | 0<br>7<br>1<br>2      | 0<br>6<br>3<br>2      | 0<br>5<br>3<br>0      | 0<br>5<br>9<br>0      | 0<br>4<br>8<br>9      | 0<br>5<br>8<br>3      | 0<br>5<br>2<br>6      | 0<br>6<br>1<br>7      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>3      | 0<br>5<br>9<br>8      | 0<br>5<br>2<br>8      | 0<br>5<br>3<br>0      | 0<br>6<br>3<br>8      | 0<br>5<br>9<br>8      | 0<br>7<br>5<br>3      | 0<br>7<br>1<br>7      | 0<br>7<br>3<br>0      | 0<br>4<br>8<br>7      | 0<br>5<br>7<br>2      |                       | 0<br>5<br>4<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      | 0<br>3<br>6<br>1      |   |
| ANIMAL ID   | 0<br>1<br>1<br>5<br>1 | 0<br>1<br>1<br>5<br>2 | 0<br>1<br>1<br>6<br>1 | 0<br>1<br>1<br>6<br>2 | 0<br>1<br>1<br>7<br>1 | 0<br>1<br>1<br>7<br>2 | 0<br>3<br>3<br>1<br>1 | 0<br>3<br>3<br>2<br>2 | 0<br>3<br>3<br>2<br>1 | 0<br>3<br>3<br>2<br>2 | 0<br>3<br>3<br>3<br>1 | 0<br>3<br>3<br>3<br>2 | 0<br>5<br>4<br>4<br>1 | 0<br>5<br>4<br>4<br>2 | 0<br>5<br>4<br>4<br>1 | 0<br>5<br>4<br>4<br>2 | 0<br>7<br>4<br>4<br>1 | 0<br>7<br>4<br>4<br>2 | 0<br>7<br>4<br>5<br>1 | 0<br>7<br>4<br>6<br>2 | 0<br>7<br>4<br>6<br>1 | 0<br>9<br>2<br>9<br>2 | 0<br>9<br>2<br>9<br>2 | 0<br>9<br>2<br>9<br>0 | 0<br>9<br>3<br>9<br>1 |   |
| Epithelium, Mucification                              | 2                     | 2                     | 4                     | 4                     | 3                     | 2                     |                       | 4                     | 3                     | 3                     | 3                     | 4                     | 4                     | 4                     | 2                     | 3                     | 3                     | 3                     | 4                     | 2                     |                       |                       | 4                     | 3                     | 2                     |   |
| <b>HEMATOPOIETIC SYSTEM</b>                           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Bone Marrow   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Hypocellularity                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |   |
| Myeloid Cell, Hyperplasia                             |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |                       |                       |   |
| Lymph Node  |                       |                       |                       | +                     | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       |   |
| Iliac, Infiltration Cellular, Plasma Cell             |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Lumbar, Hyperplasia, Lymphoid                         |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Lumbar, Infiltration Cellular, Plasma Cell            |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Popliteal, Infiltration Cellular, Plasma Cell         |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Lymph Node, Mandibular                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Hyperplasia, Lymphoid                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Infiltration Cellular, Plasma Cell                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Spleen  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Hematopoietic Cell Proliferation                      | 2                     |                       |                       |                       |                       | 2                     |                       | 2                     | 2                     | 3                     |                       |                       | 1                     |                       | 2                     |                       |                       |                       |                       | 3                     | 2                     |                       |                       | 4                     |                       |   |
| Hyperplasia, Lymphoid                                 |                       |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |   |
| Infiltration Cellular, Polymorphonuclear              |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |                       |   |
| Necrosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |                       |   |
| Pigmentation  | 4                     | 4                     | 4                     | 3                     | 2                     | 3                     | 2                     | 1                     | 3                     | 3                     | 4                     | 2                     | 4                     | 3                     | 4                     | 4                     | 3                     | 3                     | 4                     | 4                     | 4                     | 4                     | 3                     | 4                     | 4                     | 4 |
| Thymus  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     |   |
| Atrophy   | 4                     | 3                     | 3                     | 4                     | 2                     | 4                     | 3                     | 3                     | 4                     | 4                     | 4                     | 3                     | 3                     | 4                     | 3                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     |                       | 4                     | 4                     | 4 |
| Necrosis  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |                       |   |
| Epithelial Cell, Hyperplasia                          |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |   | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |   |   |
|--|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|---|---|
|  |   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 |   |   |   |
|  |   | 7           | 6 | 5 | 5 | 4 | 5 | 5 | 6 | 7 | 4 | 5 | 5 | 5 | 6 | 5 | 7 | 5 | 7 | 7 | 4 |                      | 5 | 5 | 7 | 6 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |   | 1           | 3 | 3 | 9 | 8 | 8 | 2 | 1 | 2 | 6 | 9 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 7                    | 4 | 7 | 6 | 1 |
|  |   | 2           | 2 | 0 | 0 | 9 | 3 | 6 | 7 | 6 | 3 | 8 | 8 | 0 | 8 | 8 | 8 | 3 | 7 | 0 | 7 | 2                    | 1 | 7 | 8 | 1 |
| <b>F1 0.50 EE2 F</b>                         |   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 | 0 | 0 |
|  |   | 1           | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7                    | 7 | 9 | 9 | 9 |
|  |   | 1           | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4                    | 4 | 2 | 2 | 3 |
|  |   | 5           | 5 | 6 | 6 | 7 | 7 | 1 | 1 | 2 | 2 | 3 | 3 | 7 | 7 | 8 | 8 | 9 | 9 | 5 | 5 | 6                    | 6 | 9 | 9 | 0 |
|  | 1 | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2                    | 1 | 2 | 1 |   |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus                     | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Fibrosis                           |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Galactocoele                       |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lobular               | 3 |   | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 4 | 4 | 2 |   | 2 | 2 |   | 4 | 2 | 4 | 2 | 1 | 2 | 2 |
| Inflammation, Chronic              |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolus, Dilatation               | 3 |   | 2 | 2 |   | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 |   |
| Duct, Dilatation                   | 3 |   | 4 | 2 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |   | 2 |   | 3 | 2 | 3 | 4 | 2 | 4 | 2 | 3 | 2 |   |
| Skin                               | + | + | + | + | + | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cyst Epithelial Inclusion          |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Foot, Hyperplasia      | 4 |   | 4 | 4 | 4 | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Edema                        |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Fibrosis                     | 4 |   | 4 | 4 | 4 | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Inflammation, Chronic Active | 4 |   | 4 | 4 | 4 | 4 | 3 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Necrosis                     |   |   | 4 | 4 | 4 |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Foot, Ulcer                        |   |   | 4 | 4 | 4 | 4 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Osteopetrosis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|   | 0<br>7<br>1<br>2      | 0<br>6<br>3<br>2      | 0<br>5<br>3<br>0      | 0<br>5<br>9<br>0      | 0<br>4<br>8<br>9      | 0<br>5<br>8<br>3      | 0<br>5<br>2<br>6      | 0<br>6<br>1<br>7      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>3      | 0<br>5<br>9<br>8      | 0<br>5<br>2<br>8      | 0<br>5<br>3<br>0      | 0<br>6<br>3<br>8      | 0<br>5<br>9<br>8      | 0<br>7<br>5<br>3      | 0<br>7<br>1<br>7      | 0<br>7<br>3<br>0      | 0<br>4<br>8<br>7      | 0<br>5<br>7<br>2      | 0<br>5<br>4<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      | 0<br>3<br>6<br>1      |                       |           |                      |
|   | 0<br>1<br>1<br>5<br>1 | 0<br>1<br>1<br>5<br>2 | 0<br>1<br>1<br>6<br>1 | 0<br>1<br>1<br>6<br>2 | 0<br>1<br>1<br>7<br>1 | 0<br>1<br>1<br>7<br>2 | 0<br>3<br>3<br>1<br>1 | 0<br>3<br>3<br>1<br>2 | 0<br>3<br>3<br>2<br>1 | 0<br>3<br>3<br>2<br>2 | 0<br>3<br>3<br>3<br>1 | 0<br>3<br>3<br>7<br>1 | 0<br>5<br>4<br>7<br>2 | 0<br>5<br>4<br>7<br>1 | 0<br>5<br>4<br>8<br>2 | 0<br>5<br>4<br>8<br>1 | 0<br>7<br>4<br>9<br>2 | 0<br>7<br>4<br>5<br>1 | 0<br>7<br>4<br>5<br>2 | 0<br>7<br>4<br>6<br>1 | 0<br>7<br>4<br>6<br>2 | 0<br>9<br>2<br>9<br>1 | 0<br>9<br>2<br>9<br>2 | 0<br>9<br>2<br>9<br>0 | 0<br>9<br>3<br>9<br>1 |           |                      |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compression               | 2 | 2 | 3 |   | 2 |   | 2 | 1 |   | 4 | 1 | 1 | 2 |   |   |   |   | 4 | 3 | 4 | 3 | 1 | 2 | 4 | 4 |
| Gliosis                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Hemorrhage                |   |   | 2 |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 3 |   | 2 |   |   |   |   | 2 |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ventricle, Dilatation     |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 1 | 1 |   |   | 1 | 1 |
| Nerve Trigeminal          |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Peripheral Nerve, Tibial  |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Spinal Cord, Cervical     |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Spinal Cord, Lumbar       |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Spinal Cord, Thoracic     |   |   |   |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

RESPIRATORY SYSTEM

|                                   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |   |  |   |   |  |   |   |   |  |   |   |
|-----------------------------------|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|--|---|---|--|---|---|---|--|---|---|
| Lung                              | + | + | + | + | + | + | + | + |  | + | + | + | + | + | + |  | + | + |  | + | + | + |  | + | + |
| Foreign Body                      |   |   |   | X |   |   |   |   |  |   |   |   |   |   |   |  |   |   |  |   |   |   |  |   |   |
| Infiltration Cellular, Histiocyte |   |   |   | 4 |   |   |   | 1 |  |   |   |   |   |   | 4 |  |   |   |  |   |   | 2 |  |   |   |
| Inflammation, Granulomatous       |   |   |   | 4 |   |   |   |   |  |   |   |   |   |   |   |  |   |   |  |   |   |   |  |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 0<br>7<br>1<br>2      | 0<br>6<br>3<br>2      | 0<br>5<br>3<br>0      | 0<br>5<br>9<br>0      | 0<br>4<br>8<br>9      | 0<br>5<br>8<br>3      | 0<br>5<br>2<br>6      | 0<br>6<br>1<br>7      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>3      | 0<br>5<br>9<br>8      | 0<br>5<br>2<br>8      | 0<br>5<br>3<br>0      | 0<br>6<br>3<br>8      | 0<br>5<br>9<br>8      | 0<br>7<br>5<br>3      | 0<br>7<br>1<br>7      | 0<br>7<br>3<br>0      | 0<br>4<br>8<br>7      | 0<br>5<br>7<br>2      |                       |                       | 0<br>5<br>4<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>7<br>8      |
|   | 0<br>1<br>1<br>5<br>1 | 0<br>1<br>1<br>5<br>2 | 0<br>1<br>1<br>6<br>1 | 0<br>1<br>1<br>6<br>2 | 0<br>1<br>1<br>7<br>1 | 0<br>1<br>1<br>7<br>2 | 0<br>3<br>3<br>1<br>1 | 0<br>3<br>3<br>1<br>2 | 0<br>3<br>3<br>2<br>2 | 0<br>3<br>3<br>2<br>1 | 0<br>3<br>3<br>3<br>2 | 0<br>3<br>3<br>3<br>1 | 0<br>5<br>4<br>4<br>7 | 0<br>5<br>4<br>4<br>8 | 0<br>5<br>4<br>4<br>8 | 0<br>5<br>4<br>4<br>9 | 0<br>5<br>4<br>4<br>9 | 0<br>7<br>4<br>5<br>1 | 0<br>7<br>4<br>5<br>2 | 0<br>7<br>4<br>5<br>6 | 0<br>7<br>4<br>6<br>9 | 0<br>7<br>4<br>6<br>9 | 0<br>9<br>2<br>9<br>9 | 0<br>9<br>2<br>9<br>0 | 0<br>9<br>3<br>9<br>1 |

Bronchiole, Epithelium, Hyperplasia

4

Nose

Inflammation, Chronic Active

Osteopetrosis

Olfactory Epithelium, Accumulation, Hyaline Droplet

Respiratory Epithelium, Accumulation, Hyaline Droplet

Respiratory Epithelium, Hyperplasia, Goblet Cell

Transitional Epithelium, Accumulation, Hyaline Droplet

Trachea

Inflammation, Chronic Active

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

Kidney

Casts Protein

Infiltration Cellular, Polymorphonuclear

Mineralization

Nephropathy

Cortex, Cyst

Renal Tubule, Cyst

Transitional Epithelium, Hyperplasia

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

---

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.50 EE2 F</b> | DAY ON TEST | 0 |                 |
|  |             | 6 |                 |
|  |             | 1 |                 |
|  |             | 1 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 3 |                 |
|  |             | 0 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

**ALIMENTARY SYSTEM**

|   |   |   |  |  |  |  |    |    |     |
|---|---|---|--|--|--|--|----|----|-----|
| Esophagus                               | + |   |  |  |  |  | 22 |    |     |
| Intestine Large, Colon                  | + |   |  |  |  |  | 21 |    |     |
| Intestine Small, Duodenum<br>Fibrosis   |   |   |  |  |  |  | 1  | 1  | 3.0 |
| Intestine Small, Ileum                  | + |   |  |  |  |  | 18 |    |     |
| Intestine Small, Jejunum<br>Dilatation  |   |   |  |  |  |  | 2  | 1  | 4.0 |
| Fibrosis                                |   |   |  |  |  |  |    | 1  | 4.0 |
| Inflammation, Chronic Active            |   |   |  |  |  |  |    | 1  | 4.0 |
| Metaplasia, Osseous                     |   |   |  |  |  |  |    | 1  | 3.0 |
| Epithelium, Hyperplasia                 |   |   |  |  |  |  |    | 1  | 4.0 |
| Liver                                   | + |   |  |  |  |  | 26 |    |     |
| Basophilic Focus                        | X |   |  |  |  |  |    | 14 |     |
| Clear Cell Focus                        |   |   |  |  |  |  |    | 1  |     |
| Deformity                               |   |   |  |  |  |  |    | 1  |     |
| Degeneration, Cystic                    |   |   |  |  |  |  |    | 2  | 1.5 |
| Fatty Change                            |   |   |  |  |  |  |    | 3  | 1.7 |
| Infiltration Cellular, Mononuclear Cell |   |   |  |  |  |  |    | 10 | 1.2 |
| Mineralization                          |   |   |  |  |  |  |    | 1  | 1.0 |
| Mixed Cell Focus                        |   |   |  |  |  |  |    | 1  |     |
| Tension Lipidosis                       |   | 3 |  |  |  |  |    | 7  | 3.1 |
| Vacuolization Cytoplasmic               |   |   |  |  |  |  |    | 7  | 1.4 |
| Bile Duct, Hyperplasia                  |   |   |  |  |  |  |    | 1  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F |   | DAY ON TEST |                 |     |
|---|---|-------------|-----------------|-----|
|   |   | ANIMAL ID   |                 |     |
|   |   | 0           |                 |     |
|   |   | 6           |                 |     |
|   |   | 1           |                 |     |
|   |   | 1           |                 |     |
|   |   | 0           |                 |     |
|   |   | 9           |                 |     |
|   |   | 3           |                 |     |
|   |   | 0           |                 |     |
|   |   | 2           |                 |     |
|   |   |             | <b>* TOTALS</b> |     |
| Capsule, Fibrosis                                     |   |             | 1               | 2.0 |
| Mesentery   |   |             | 1               |     |
| Fat, Inflammation, Granulomatous                      |   |             | 1               | 4.0 |
| Fat, Necrosis   |   |             | 1               | 4.0 |
| Pancreas  | + |             | 26              |     |
| Infiltration Cellular, Lymphocyte                     | 1 |             | 13              | 1.5 |
| Inflammation, Chronic Active                          |   |             | 1               | 2.0 |
| Pigmentation  |   |             | 5               | 1.2 |
| Acinar Cell, Hyperplasia                              |   |             | 2               | 4.0 |
| Acinus, Degeneration                                  | 1 |             | 16              | 1.9 |
| Stomach, Forestomach                                  | + |             | 22              |     |
| Stomach, Glandular                                    | + |             | 21              |     |
| Tongue  |   |             | 1               |     |
| Ulcer   |   |             | 1               | 3.0 |
| <b>CARDIOVASCULAR SYSTEM</b>                          |   |             |                 |     |
| Blood Vessel  | + |             | 26              |     |
| Heart   | + |             | 26              |     |
| Cardiomyopathy  | 1 |             | 22              | 1.5 |
| <b>ENDOCRINE SYSTEM</b>                               |   |             |                 |     |
| Adrenal Cortex  | + |             | 26              |     |
| Angiectasis   | 3 |             | 9               | 3.6 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F |  | DAY ON TEST | ANIMAL ID |                 |     |
|---|--|-------------|-----------|-----------------|-----|
|   |  | 0           | 0         |                 |     |
|   |  | 6           | 9         |                 |     |
|   |  | 1           | 3         |                 |     |
|   |  | 1           | 0         |                 |     |
|   |  |             | 2         |                 |     |
|   |  |             |           | <b>* TOTALS</b> |     |
| Degeneration, Cystic                                  |  | 4           |           | 22              | 3.2 |
| Fibrosis  |  |             |           | 1               | 2.0 |
| Hemorrhage  |  |             |           | 1               | 4.0 |
| Hyperplasia   |  |             |           | 1               | 1.0 |
| Hypertrophy   |  |             |           | 2               | 3.0 |
| Metaplasia, Osseous                                   |  |             |           | 1               | 3.0 |
| Pigmentation  |  |             |           | 2               | 2.5 |
| Vacuolization Cytoplasmic                             |  |             |           | 1               | 2.0 |
| Adrenal Medulla                                       |  |             |           | 26              |     |
| Hyperplasia   |  | +           |           | 8               | 1.5 |
| Islets, Pancreatic                                    |  |             |           | 26              |     |
| Parathyroid Gland                                     |  |             |           | 26              |     |
| Hyperplasia   |  | +           |           | 2               | 1.5 |
| Pituitary Gland                                       |  |             |           | 26              |     |
| Angiectasis   |  | 4           |           | 17              | 4.0 |
| Hemorrhage  |  |             |           | 3               | 4.0 |
| Pars Distalis, Cyst                                   |  |             |           | 2               |     |
| Pars Distalis, Hyperplasia                            |  |             |           | 6               | 3.3 |
| Thyroid Gland   |  |             |           | 25              |     |
| Ultimobranchial Cyst                                  |  | X           |           | 8               |     |
| C-cell, Hyperplasia                                   |  |             |           | 9               | 1.6 |

**GENERAL BODY SYSTEM**

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.50 EE2 F</b> | DAY ON TEST | 0 |                 |
|  |             | 6 |                 |
|  |             | 1 |                 |
|  |             | 1 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 3 |                 |
|  |             | 0 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

**GENITAL SYSTEM**

|  |   |   |           |               |
|--|---|---|-----------|---------------|
| Clitoral Gland                           |   |   | <b>6</b>  |               |
| Inflammation, Suppurative                |   |   |           | <b>4 4.0</b>  |
| Duct, Dilatation                         |   |   |           | <b>6 3.8</b>  |
| Ovary                                    | + |   | <b>26</b> |               |
| Atrophy                                  |   | 2 |           | <b>26 3.9</b> |
| Cyst                                     |   |   |           | <b>5</b>      |
| Hyperplasia, Sertoliform                 |   | 1 |           | <b>3 2.0</b>  |
| Bursa, Cyst                              |   |   |           | <b>2</b>      |
| Follicle, Cyst                           |   |   |           | <b>3</b>      |
| Granulosa Cell, Hyperplasia              |   |   |           | <b>1 3.0</b>  |
| Oviduct                                  | + |   | <b>26</b> |               |
| Uterus                                   | + |   | <b>26</b> |               |
| Atrophy                                  |   |   |           | <b>9 3.4</b>  |
| Metaplasia, Squamous                     |   |   |           | <b>4 1.5</b>  |
| Endometrial Glands, Hyperplasia          |   |   |           | <b>1 2.0</b>  |
| Endometrium, Cyst                        |   |   |           | <b>2</b>      |
| Endometrium, Hyperplasia                 |   | 1 |           | <b>2 1.5</b>  |
| Endometrium, Hyperplasia, Cystic         |   |   |           | <b>14 2.5</b> |
| Lumen, Dilatation                        |   |   |           | <b>3 4.0</b>  |
| Vagina                                   | + |   | <b>26</b> |               |
| Atrophy                                  |   |   |           | <b>3 3.0</b>  |
| Infiltration Cellular, Polymorphonuclear |   |   |           | <b>2 3.0</b>  |
| Epithelium, Degeneration                 |   |   |           | <b>2 2.5</b>  |
| Epithelium, Hyperplasia                  |   |   |           | <b>2 2.5</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F | DAY ON TEST | ANIMAL ID | * TOTALS |     |
|---|-------------|-----------|----------|-----|
|   | 0           | 0         |          |     |
|   | 6           | 9         |          |     |
|   | 1           | 3         |          |     |
|   | 1           | 0         |          |     |
|   |             | 2         |          |     |
| Epithelium, Mucification                              | 4           |           | 23       | 3.1 |

### HEMATOPOIETIC SYSTEM

|   |   |  |    |        |
|---|---|--|----|--------|
| Bone Marrow                                   | + |  | 26 |        |
| Hypocellularity                               |   |  |    | 1 3.0  |
| Myeloid Cell, Hyperplasia                     |   |  |    | 2 2.5  |
| Lymph Node                                    |   |  | 3  |        |
| Iliac, Infiltration Cellular, Plasma Cell     |   |  |    | 1 4.0  |
| Lumbar, Hyperplasia, Lymphoid                 |   |  |    | 1 4.0  |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |  |    | 1 4.0  |
| Popliteal, Infiltration Cellular, Plasma Cell |   |  |    | 1 4.0  |
| Lymph Node, Mandibular                        |   |  | 1  |        |
| Hyperplasia, Lymphoid                         |   |  |    | 1 4.0  |
| Infiltration Cellular, Plasma Cell            |   |  |    | 1 4.0  |
| Spleen  | + |  | 26 |        |
| Hematopoietic Cell Proliferation              |   |  |    | 10 2.3 |
| Hyperplasia, Lymphoid                         |   |  |    | 1 3.0  |
| Infiltration Cellular, Polymorphonuclear      |   |  |    | 1 2.0  |
| Necrosis                                      |   |  |    | 1 3.0  |
| Pigmentation                                  | 2 |  | 26 | 3.3    |
| Thymus  | + |  | 26 |        |
| Atrophy                                       | 4 |  |    | 25 3.6 |
| Necrosis                                      |   |  |    | 1 4.0  |
| Epithelial Cell, Hyperplasia                  |   |  |    | 1 3.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |   |                 |
|--|-------------|---|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 0.50 EE2 F</b> | DAY ON TEST | 0 |                 |
|  |             | 6 |                 |
|  |             | 1 |                 |
|  |             | 1 |                 |
|  | ANIMAL ID   | 0 |                 |
|  |             | 9 |                 |
|  |             | 3 |                 |
|  |             | 0 |                 |
|  |             | 2 |                 |
|  |             |   | <b>* TOTALS</b> |

**INTEGUMENTARY SYSTEM**

|                                    |   |   |           |        |
|------------------------------------|---|---|-----------|--------|
| Mammary Gland                      | + |   | <b>26</b> |        |
| Atypical Focus                     |   | 1 |           | 3 1.3  |
| Fibrosis                           |   |   |           | 1 4.0  |
| Galactocele                        |   |   |           | 2      |
| Hyperplasia, Lobular               |   | 4 |           | 23 2.8 |
| Inflammation, Chronic              |   |   |           | 1 4.0  |
| Alveolus, Dilatation               |   |   |           | 22 2.2 |
| Duct, Dilatation                   |   |   |           | 21 2.7 |
| Skin                               |   |   | <b>9</b>  |        |
| Cyst Epithelial Inclusion          |   |   |           | 1      |
| Epithelium, Foot, Hyperplasia      |   |   |           | 8 4.0  |
| Foot, Edema                        |   |   |           | 4 4.0  |
| Foot, Fibrosis                     |   |   |           | 8 4.0  |
| Foot, Inflammation, Chronic Active |   |   |           | 8 3.9  |
| Foot, Necrosis                     |   |   |           | 6 4.0  |
| Foot, Ulcer                        |   |   |           | 7 4.0  |

**MUSCULOSKELETAL SYSTEM**

|                 |   |  |           |       |
|-----------------|---|--|-----------|-------|
| Bone, Femur     | + |  | <b>26</b> |       |
| Osteopetrosis   |   |  |           | 1 3.0 |
| Skeletal Muscle |   |  | <b>3</b>  |       |

**NERVOUS SYSTEM**

|                   |   |  |           |  |
|-------------------|---|--|-----------|--|
| Brain, Brain Stem | + |  | <b>26</b> |  |
|-------------------|---|--|-----------|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 0.50 EE2 F |   | DAY ON TEST | ANIMAL ID | * TOTALS |     |
|---|---|-------------|-----------|----------|-----|
|   |   | 0           |           |          |     |
|   |   | 6           |           |          |     |
|   |   | 1           |           |          |     |
|   |   | 1           |           |          |     |
|   |   | 0           |           |          |     |
|   |   | 9           |           |          |     |
|   |   | 3           |           |          |     |
|   |   | 0           |           |          |     |
|   |   | 2           |           |          |     |
| Compression   |   | 4           |           | 19       | 2.6 |
| Gliosis   |   |             |           | 1        | 2.0 |
| Hemorrhage  |   |             |           | 5        | 2.2 |
| Brain, Cerebellum                                     | + |             |           | 26       |     |
| Hemorrhage  |   |             |           | 1        | 3.0 |
| Brain, Cerebrum                                       | + |             |           | 26       |     |
| Ventricle, Dilatation                                 |   | 1           |           | 8        | 1.4 |
| Nerve Trigeminal                                      |   |             |           | 4        |     |
| Axon, Degeneration                                    |   |             |           | 1        | 1.0 |
| Peripheral Nerve, Sciatic                             |   |             |           | 4        |     |
| Peripheral Nerve, Tibial                              |   |             |           | 4        |     |
| Spinal Cord, Cervical                                 |   |             |           | 4        |     |
| Spinal Cord, Lumbar                                   |   |             |           | 4        |     |
| Axon, Degeneration                                    |   |             |           | 1        | 2.0 |
| Spinal Cord, Thoracic                                 |   |             |           | 4        |     |
| <b>RESPIRATORY SYSTEM</b>                             |   |             |           |          |     |
| Lung  | + |             |           | 22       |     |
| Foreign Body  |   |             |           |          | 1   |
| Infiltration Cellular, Histiocyte                     |   |             |           | 4        | 2.8 |
| Inflammation, Granulomatous                           |   |             |           | 1        | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |                       |                 |
|--|-------------|-----------------------|-----------------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS FEMALE</b><br><b>F1 0.50 EE2 F</b> | DAY ON TEST | 0<br>6<br>1<br>1      |                 |
|  | ANIMAL ID   | 0<br>9<br>3<br>0<br>2 |                 |
|  |             |                       | <b>* TOTALS</b> |

Bronchiole, Epithelium, Hyperplasia

1 4.0

Nose

+

22

Inflammation, Chronic Active

1 4.0

Osteopetrosis

1 2.0

Olfactory Epithelium, Accumulation, Hyaline Droplet

4

7 2.7

Respiratory Epithelium, Accumulation, Hyaline Droplet

3 1.7

Respiratory Epithelium, Hyperplasia, Goblet Cell

2 2.0

Transitional Epithelium, Accumulation, Hyaline Droplet

1 3.0

Trachea

+

20

Inflammation, Chronic Active

1 2.0

### SPECIAL SENSES SYSTEM

NONE

### URINARY SYSTEM

Kidney

+

26

Casts Protein

2 1.0

Infiltration Cellular, Polymorphonuclear

1 2.0

Mineralization

17 1.4

Nephropathy

2

15 1.9

Cortex, Cyst

2

Renal Tubule, Cyst

6

Transitional Epithelium, Hyperplasia

9 1.4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

---

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| DAY ON TEST                          |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females<br>(cont...) |   |
|--------------------------------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE | F1 Veh. StDose F | 3 | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 | 6 | 6 | 5 | 6 |                      | 7 |
|                                      |                  | 8 | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3 | 3 | 0 | 8 |                      | 2 |
| ANIMAL ID                            |                  | 6 | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7 | 5 | 3 | 2 | 8                    |   |
|                                      |                  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    |   |
|                                      |                  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5                    |   |
|                                      |                  | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6                    |   |
|                                      |                  | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3                    |   |
|                                      |                  | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1                    |   |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Large, Colon                  | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Small, Ileum                  | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Small, Jejunum                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                        | X | X | X | X |   | X |   |   | X |   | X |   |   |   |   |   |   | X | X | X |   | X | X | X |   |
| Clear Cell Focus                        |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X |   |   |   |
| Cyst                                    |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                            |   |   |   | 3 |   |   |   |   | 3 |   |   |   |   |   | 2 | 3 |   |   |   |   | 2 |   |   |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell |   | 1 |   | 1 |   | 1 |   | 1 | 2 | 1 |   | 2 |   |   | 1 | 1 | 1 | 2 |   | 1 | 1 | 2 |   | 2 | 1 |
| Inflammation, Chronic Active            |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Mineralization                          |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Vacuolization Cytoplasmic               |   |   | 1 |   | 2 |   | 1 | 2 |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   |   | 4 |   |
| Bile Duct, Hyperplasia                  |   |   |   |   |   |   |   | 2 |   | 1 | 2 |   |   | 2 |   |   |   | 3 |   | 2 |   | 2 |   | 2 | 2 |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Biliary Tract, Cyst, Multiple           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   | 1 | 1 |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |
|  | 3           | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 | 6 | 6 | 5 | 6         | 7                    |
|  | 8           | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3 | 3 | 0 | 8         | 2                    |
|  | 6           | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7 | 5 | 3 | 2         | 8                    |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                    |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5         | 5                    |
|  | 2           | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6         |                      |
|  | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2         |                      |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2         |                      |

Hepatocyte, Degeneration  
Hepatocyte, Necrosis  
Oval Cell, Hyperplasia

1

Mesentery  
Fat, Necrosis

+  
3

Oral Mucosa

Pancreas

Basophilic Focus  
Infiltration Cellular, Lymphocyte  
Inflammation, Chronic Active  
Lipomatosis  
Pigmentation  
Polyarteritis  
Acinus, Degeneration  
Artery, Fibrosis  
Artery, Inflammation, Chronic Active  
Artery, Mineralization

+ + + + + + + + + A + + + + + + + + + + + +

1 2 1 2 1 3 2 2 1 1 1 2 1 1 3 1 2

2

3

1 1 1 1 1 4 1 1 1 1

1 1 2 1 3 4 4 3 4 1 4 1 2 2 2 1 3 3

4

2

3

Stomach, Forestomach

+ + + + + + + + A + + + + + + + + + + + +

Stomach, Glandular  
Mineralization

+ + + + + + + + A + + + + + + + + + + + +  
3

CARDIOVASCULAR SYSTEM

Blood Vessel  
Mineralization

+  
4

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females<br>(cont...) |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|--|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      |  |
|  | 3           | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 | 6 | 6 | 5 | 6 | 7         | 0                    |  |
|  | 8           | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3 | 3 | 0 | 8 | 2         | 1                    |  |
|  | 6           | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7 | 5 | 3 | 2 | 8         | 2                    |  |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                    |  |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5         | 1                    |  |
|  | 2           | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6         | 2                    |  |
|  | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2         | 3                    |  |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         | 1                    |  |

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Cardiomyopathy |   | 2 |   | 1 |   | 2 |   | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 |   |   |   | 1 |   |   | 1 | 1 | 3 |  |
| Mineralization |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |  |

**ENDOCRINE SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Angiectasis                       |   | 3 |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |  |  |
| Cyst                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Degeneration, Cystic              |   | 3 |   | 2 |   |   |   | 4 |   |   |   | 3 | 4 |   | 2 | 4 | 1 |   | 2 | 2 |   |   |   | 1 |  |  |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Hypertrophy                       |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Vacuolization Cytoplasmic         |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 1 |   |   |   |   |   |  |  |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Parathyroid Gland                 | + | + | + | + | + | M | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Hyperplasia                       |   | 3 | 1 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |  |  |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
| Angiectasis                       |   | 4 |   |   |   |   |   | 4 | 4 |   |   |   |   | 4 | 4 |   |   |   |   |   | 4 |   |   | 4 |  |  |
| Pars Distalis, Cyst               |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Pars Distalis, Hyperplasia        | 3 |   | 3 | 3 | 4 |   | 2 |   |   |   |   | 2 | 4 |   |   | 4 | 3 | 4 | 2 | 2 |   | 4 |   |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |   |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|---|---|
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 |   |   |   |
|  |  | 3           | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 |                      | 6 | 6 | 5 | 6 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |  | 8           | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3                    | 3 | 0 | 8 | 2 |
|  |  | 6           | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7                    | 5 | 3 | 2 | 8 |
| <b>F1 Veh. StDose F</b>                      |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 | 0 | 0 |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3                    | 5 | 5 | 5 | 5 |
|  |  | 2           | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6                    | 6 | 6 | 6 | 6 |
|  |  | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1                    | 2 | 2 | 3 | 1 |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                    | 2 | 1 | 2 | 1 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ultimobranchial Cyst         |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          | 1 | 1 | 1 |   |   |   |   |   | 2 | 3 |   |   | 2 | 1 |   | 1 |   | 2 | 1 | 2 | 2 | 2 | 3 | 2 |   |
| Follicular Cell, Hyperplasia |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

GENERAL BODY SYSTEM

|            |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tissue NOS |  |  |  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

GENITAL SYSTEM

|                           |  |  |  |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |   |
|---------------------------|--|--|--|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|---|---|
| Clitoral Gland            |  |  |  | + |  |  |  |  |  |  |  | + |  |  |  |  |  |  |  |  |  |  | + | + |
| Atrophy                   |  |  |  |   |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |   |   |
| Hyperkeratosis            |  |  |  |   |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |   | 4 |
| Inflammation, Suppurative |  |  |  | 4 |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  | 2 | 4 |
| Duct, Dilatation          |  |  |  | 4 |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  | 3 | 4 |

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ovary                       | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                     |   | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 4 |   | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 2 | 2 | 4 | 2 | 3 |
| Cyst                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Sertoliform    |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Tubulostromal  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Follicle, Cyst   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bursa, Cyst                 |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst              |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Granulosa Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Rete Ovarii, Hyperplasia    |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oviduct | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>3<br>8<br>6      | 0<br>6<br>0<br>3      | 0<br>5<br>9<br>5      | 0<br>5<br>2<br>0      | 0<br>5<br>0<br>0      | 0<br>6<br>9<br>2      | 0<br>4<br>5<br>9      | 0<br>7<br>2<br>5      | 0<br>5<br>8<br>3      | 0<br>7<br>2<br>6      | 0<br>6<br>7<br>0      | 0<br>6<br>2<br>9      | 0<br>6<br>6<br>3      | 0<br>5<br>1<br>5      | 0<br>5<br>7<br>0      | 0<br>7<br>0<br>8      | 0<br>4<br>9<br>3      | 0<br>4<br>6<br>0      | 0<br>7<br>0<br>8      | 0<br>6<br>3<br>7      |                       |                       | 0<br>6<br>3<br>5      | 0<br>5<br>0<br>3      | 0<br>6<br>8<br>2      |
|  | 0<br>1<br>2<br>9<br>1 | 0<br>1<br>2<br>9<br>2 | 0<br>1<br>3<br>0<br>1 | 0<br>1<br>3<br>0<br>1 | 0<br>1<br>3<br>1<br>2 | 0<br>1<br>3<br>1<br>2 | 0<br>1<br>3<br>1<br>2 | 0<br>1<br>3<br>3<br>2 | 0<br>1<br>3<br>3<br>1 | 0<br>3<br>3<br>4<br>5 | 0<br>3<br>3<br>4<br>5 | 0<br>3<br>3<br>4<br>6 | 0<br>3<br>3<br>4<br>6 | 0<br>3<br>3<br>4<br>7 | 0<br>3<br>3<br>4<br>8 | 0<br>3<br>3<br>4<br>8 | 0<br>3<br>3<br>4<br>8 | 0<br>3<br>3<br>4<br>8 | 0<br>3<br>3<br>4<br>8 | 0<br>5<br>6<br>9<br>1 | 0<br>5<br>6<br>9<br>1 | 0<br>5<br>6<br>9<br>2 | 0<br>5<br>6<br>9<br>2 | 0<br>5<br>6<br>9<br>2 | 0<br>5<br>6<br>9<br>3 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uterus   | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy  |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Metaplasia, Squamous<br>Cervix, Cyst, Squamous                       |   | 1 |   |   |   |   |   |   |   | 2 |   |   |   | 1 |   |   |   |   | 2 |   |   |   | 1 |   |   |
| Endometrial Glands, Hyperplasia<br>Endometrium, Cyst                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia   |   | 2 | 2 |   |   |   | 2 |   |   |   |   | 1 |   | 2 |   |   |   |   |   |   | 2 |   | 1 |   | 1 |
| Endometrium, Hyperplasia, Cystic<br>Lumen, Dilatation                |   |   |   | 2 | 2 | 2 |   |   | 1 | 4 |   |   | 1 | 3 |   |   | 3 | 3 | 4 |   | 2 |   | 2 |   | 2 |
|  |   |   | 4 |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vagina   | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Atrophy  |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear<br>Epithelium, Degeneration |   | 3 |   | 4 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Epithelium, Hyperplasia  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Epithelium, Mucification<br>Lumen, Dilatation                        |   | 4 | 3 | 4 | 4 | 2 | 4 |   | 3 | 3 |   | 3 | 4 |   | 4 | 4 | 3 |   | 4 |   | 3 | 2 | 4 | 3 |   |

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Lymph Node                                    |   | + |   |   |   | + |   |   |   |   | + |   | + |   |   |   |   |   |   |   | + |   |   |   |
| Lumbar, Degeneration, Cystic                  |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   |   |   |   | 4 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   |   |   |   | 4 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinal, Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Hyperplasia, Lymphoid             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS FEMALE</b> | 3 | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 4 | 7 | 6 | 6 | 5 | 6 | 6 | 5 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 |
|  | 8 | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3 | 3 | 0 | 8 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 |
| <b>F1 Veh. StDose F</b>                            | 6 | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7 | 5 | 3 | 2 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 | 8 | 2 |
| ANIMAL ID  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
|  | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
|  | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |

females  
(cont...)

|   |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|---|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Popliteal, Infiltration Cellular, Plasma Cell |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Degeneration, Cystic                   |  |  |   |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Hyperplasia, Lymphoid                  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Infiltration Cellular, Plasma Cell     |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular                        |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic                          |  |  | + |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                         |  |  | 4 |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Plasma Cell            |  |  | 3 |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation              |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                         |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigmentation                                  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                       |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polyarteritis                                 |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelial Cell, Hyperplasia                  |  |  |   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**INTEGUMENTARY SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mammary Gland        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atypical Focus       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Galactocele          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lobular |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metaplasia, Osseous  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alveolus, Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |   |   |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|---|---|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      | 0 |   |   |
|  | 3           | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 | 6         | 6                    | 5 | 6 | 7 |
|  | 8           | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3         | 3                    | 0 | 8 | 2 |
|  | 6           | 3 | 5 | 0 | 0 | 2 | 9 | 5 | 3 | 6 | 8 | 0 | 9 | 3 | 5 | 0 | 8 | 3 | 9 | 8 | 7         | 5                    | 3 | 2 | 8 |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         | 0                    | 0 | 0 | 0 |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5         | 5                    | 5 | 5 | 5 |
|  | 2           | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6         | 6                    | 6 | 6 |   |
|  | 9           | 9 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1         | 1                    | 2 | 2 |   |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         | 2                    | 1 | 2 | 1 |

|                                    |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|---|--|---|--|--|--|--|--|---|--|---|--|--|--|--|--|--|--|--|--|
| Skin                               |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
| Epithelium, Foot, Hyperplasia      |  |  |  |  |  | + |  | + |  |  |  |  |  | + |  | + |  |  |  |  |  |  |  |  |  |
| Foot, Edema                        |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
| Foot, Fibrosis                     |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
| Foot, Inflammation, Chronic Active |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
| Foot, Necrosis                     |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |
| Foot, Ulcer                        |  |  |  |  |  |   |  |   |  |  |  |  |  |   |  |   |  |  |  |  |  |  |  |  |  |

**MUSCULOSKELETAL SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tarsal, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tarsal, Hyperostosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tarsal, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tarsal, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Tarsal, Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bone, Femur                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Fibrous Osteodystrophy               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

**NERVOUS SYSTEM**

|                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Brain, Brain Stem     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compression           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebellum     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Brain, Cerebrum       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ventricle, Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|  |           | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |
|--|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | ANIMAL ID | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      |   |
|  |           | 3           | 6 | 5 | 5 | 5 | 6 | 4 | 7 | 5 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 7 | 4 | 4 | 7 | 0 | 6 | 6 | 5 |                      | 6 |
|  |           | 8           | 0 | 9 | 2 | 0 | 5 | 9 | 2 | 8 | 2 | 7 | 0 | 2 | 6 | 1 | 7 | 0 | 9 | 6 | 0 | 3 | 3 | 0 | 8 | 8                    | 2 |
|  |           | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 |
|  |           | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5                    | 5 |
|  |           | 2           | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6                    | 6 |
|  |           | 9           | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 1 | 2 | 2 | 3                    | 3 |
|  |           | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                    | 2 |

Nerve Trigeminal +

Peripheral Nerve, Sciatic +

Peripheral Nerve, Tibial +

Spinal Cord, Cervical +

Spinal Cord, Lumbar +

Spinal Cord, Thoracic +

**RESPIRATORY SYSTEM**

Lung + + + + + + + + + + A + + + + + + + + + + + + + +

Congestion + + + + + + + + + + + + 4 + + + + + + + 3

Hemorrhage

Infiltration Cellular, Histiocyte 1 2 1

Nose + + + + + + + + + + A + + + + + + + + + + + + + +

Olfactory Epithelium, Accumulation, Hyaline Droplet 2 1 1 2

Respiratory Epithelium, Accumulation, Hyaline Droplet

Respiratory Epithelium, Hyperplasia, Goblet Cell

Upper Molar, Inflammation, Chronic Active

Trachea + + + + + + + + + + A + + + + + + + + + + + + + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

1-4 .. Lesion qualified as:

X .. Lesion present

A .. Autolysis precludes evaluation

1) Minimal 3) Moderate

I .. Insufficient tissue

BLANK .. Not examined microscopically

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST | 0386 | 0053 | 0095 | 0050 | 0052 | 0064 | 0077 | 0059 | 0078 | 0062 | 0076 | 0066 | 0055 | 0055 | 0070 | 0044 | 0044 | 0077 | 0066 | 0066 | 0055 | 0066 | 0077 | females<br>(cont...) |
|  | ANIMAL ID   | 0129 | 0113 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 | 0103 |                      |

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |
| Casts Protein                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                       |   | 1 | 1 |   |   |   |   |   |   | 1 | 1 |   |   |   | 4 | 2 | 1 | 1 |   | 2 | 1 |   | 1 | 2 | 1 |   |
| Nephropathy                          |   | 2 |   |   |   | 3 |   |   | 1 |   |   |   | 1 | 2 | 4 |   | 1 | 1 | 2 |   | 1 | 1 | 1 | 2 | 1 | 1 |
| Cortex, Cyst                         |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |
| Renal Tubule, Cyst                   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   | X |   |
| Transitional Epithelium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

**Experiment Number:** 10034 - 04  
**Test Type:** CHRONIC  
**Route:** GAVAGE  
**Species/Strain:** RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
**CAS Number:** 80-05-7

**Date Report Requested:** 08/16/2017  
**Time Report Requested:** 10:21:03  
**First Dose M/F:** 09/25/12 / 09/25/12  
**Lab:** NCTR

| DAY ON TEST                                  |                         | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|--|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | <b>F1 Veh. StDose F</b> | 6 | 7 | 7 | 7 | 5 | 5 | 7 | 2 | 5 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 4 | 6 | 7 | 5 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 |   |   |
|  |                         | 2 | 3 | 3 | 2 | 7 | 0 | 2 | 6 | 7 | 9 | 1 | 2 | 2 | 3 | 3 | 2 | 1 | 6 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   |
|  |                         | 5 | 0 | 0 | 8 | 1 | 3 | 8 | 0 | 4 | 6 | 4 | 9 | 7 | 4 | 4 | 0 | 0 | 8 | 0 | 7 | 3 | 7 | 3 | 5 | 5 | 5 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  | <b>ANIMAL ID</b>        | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|  |                         | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |   |
|  |                         | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |   |
|  |                         | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |   |
|  |                         | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                              |                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ALIMENTARY SYSTEM**

|   |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |           |
|---|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|
| Esophagus                               | +                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>38</b> |
| Intestine Large, Colon                  | +                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>38</b> |
| Intestine Small, Ileum                  | +                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>36</b> |
| Intestine Small, Jejunum                | +                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b>  |
| Liver                                   | +                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>49</b> |
| Angiectasis                             |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 1.7     |
| Basophilic Focus                        | X                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 22        |
| Clear Cell Focus                        | X                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9         |
| Cyst                                    |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1         |
| Degeneration, Cystic                    |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 1.0     |
| Eosinophilic Focus                      |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1         |
| Fatty Change                            | 3 4 2 3 2 3 3 3 2 1 3 4 3 3     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 19 2.7    |
| Hematopoietic Cell Proliferation        | 1                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 1.0     |
| Hepatodiaphragmatic Nodule              | X                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2         |
| Infiltration Cellular, Mononuclear Cell | 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 29 1.3    |
| Inflammation, Chronic Active            |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 1.0     |
| Mineralization                          |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 1.0     |
| Mixed Cell Focus                        |                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1         |
| Tension Lipidosis                       | 1                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 2.8     |
| Vacuolization Cytoplasmic               | 2 1 1 1 2                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 12 1.7    |
| Bile Duct, Hyperplasia                  | 1 4 1 1 1 1 1                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 20 1.7    |
| Biliary Tract, Cyst                     | X                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3         |
| Biliary Tract, Cyst, Multiple           | X                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1         |
| Biliary Tract, Fibrosis                 | 2                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 1.1     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |      |      |      |      |      |
|--|-------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|
|  | 0625        | 0730  | 0730  | 0778  | 0571  | 0573 | 0728 | 0256 | 0574 | 0496 | 0774 | 0777 | 0777 | 0575 | 0553 | 0773 | 0575 | 0463 | 0772 | 0522 |          | 0622 | 0771 | 0772 | 0675 | 0771 | 0772 | 0676 | 0775 |
| ANIMAL ID  | 05632       | 05641 | 05642 | 05651 | 05652 | 0771 | 0772 | 0777 | 0778 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779     | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 |
| Hepatocyte, Degeneration                                 | 4           |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        | 4.0  |      |      |      |      |      |      |      |
| Hepatocyte, Necrosis                                     |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        | 1.0  |      |      |      |      |      |      |      |
| Oval Cell, Hyperplasia                                   |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1        | 1.0  |      |      |      |      |      |      |      |
| Mesentery  |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2    |      |      |      |      |      |      |      |
| Fat, Necrosis  |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 3    |      |      |      |      |      |      |      |
| Oral Mucosa  | +           |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| Pancreas   | +           | +     | +     | +     | +     | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +    | +    | +    | +    | +    |
| Basophilic Focus   | X           |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2    |      |      |      |      |      |      |      |
| Infiltration Cellular, Lymphocyte                        | 1           | 2     | 2     | 1     | 2     |      | 3    |      | 2    | 2    |      | 3    |      | 2    |      | 1    | 2    |      | 3    | 3    | 2        |      |      |      |      |      |      |      |      |
| Inflammation, Chronic Active                             | 3           |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 4    |      |      |      |      |      |      |      |
| Lipomatosis  |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 2    |      |      |      |      |      |      |      |
| Pigmentation   |             |       | 1     |       | 1     | 2    | 1    | 1    |      | 1    | 1    |      |      |      | 2    | 1    | 1    |      |      |      |          |      |      |      |      |      |      |      |      |
| Polyarteritis  |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| Acinus, Degeneration                                     | 1           | 3     | 3     | 2     | 3     | 4    | 3    | 1    | 4    | 3    | 1    | 4    |      | 2    |      |      |      | 4    | 3    | 4    | 3        | 2    | 1    |      |      |      |      |      |      |
| Artery, Fibrosis   |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| Artery, Inflammation, Chronic Active                     |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| Artery, Mineralization                                   |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| Stomach, Forestomach                                     | +           |       |       |       | +     | +    |      | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      | +    | +        | +    |      |      |      |      | +    |      |      |
| Stomach, Glandular                                       | +           |       |       |       | +     | +    |      | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      | +    | +        | +    |      |      |      |      | +    |      |      |
| Mineralization   |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |
| <b>CARDIOVASCULAR SYSTEM</b>                             |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |
| Blood Vessel   | +           | +     | +     | +     | +     | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +    | +    | +    | +    | +    |
| Mineralization   |             |       |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          | 1    |      |      |      |      |      |      |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0625        | 0730  | 0730  | 0778  | 0571  | 0573  | 0728  | 0260  | 0574  | 0476  | 0774  | 0777  | 0777  | 0575  | 0575  | 0772  | 0363  | 0773  | 0562  | 0672  | 0773  | 0665  | 0775  | 0779  |          |
| ANIMAL ID  | 05632       | 05641 | 05642 | 05651 | 05652 | 05671 | 05672 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677    |

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cardiomyopathy |   |   | 3 |   | 1 | 1 | 1 | 1 |   | 1 |   | 1 | 1 |   | 1 |   | 1 |   | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 32 |
| Mineralization |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

**ENDOCRINE SYSTEM**

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |
| Angiectasis                       |   |   |   | 2 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |    | 6  |
| Cyst                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |    | 1  |
| Degeneration, Cystic              | 4 | 1 | 4 | 1 | 4 | 2 | 4 |   | 4 | 3 |   | 4 | 2 | 2 | 4 | 3 |   |   |   |   | 4 |   |   | 4 | 27 |    |
| Hemorrhage                        |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3  |
| Hypertrophy                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |
| Vacuolization Cytoplasmic         |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 1 |   |   |    | 4  |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |
| Hyperplasia                       |   |   | 1 |   |   |   | 2 |   |   |   |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   | 2 |   |    | 7  |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |
| Hyperplasia                       |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |
| Parathyroid Gland                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | M | + | +  | 45 |
| Hyperplasia                       |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |    | 5  |
| Pituitary Gland                   | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |
| Angiectasis                       |   |   |   | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   | 4  | 12 |
| Pars Distalis, Cyst               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X  | 4  |
| Pars Distalis, Hyperplasia        |   |   |   |   | 4 |   | 1 |   |   | 4 | 2 | 2 | 1 |   |   |   | 3 | 1 | 3 | 3 | 2 |   |   |   | 4  | 25 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |        |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|--------|
|  | 0652        | 0773  | 0773  | 0778  | 0571  | 0553  | 0728  | 0256  | 0074  | 0046  | 0074  | 0077  | 0077  | 0053  | 0055  | 0073  | 0051  | 0046  | 0063  | 0072  |          | 0052  | 0065  | 0071  | 0072  | 0068  | 0070   |
| ANIMAL ID  | 05632       | 05641 | 05644 | 05611 | 05622 | 05671 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699    | 05699 | 05699 | 05699 | 05699 | 05699 |        |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | +     | 48     |
| Ultimobranchial Cyst                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |       | 2      |
| C-cell, Hyperplasia                                      |             |       |       | 2     | 2     | 2     |       |       | 2     | 2     |       |       | 1     | 2     |       |       |       | 2     |       | 4     |          | 1     |       | 2     |       |       | 26 1.8 |
| Follicular Cell, Hyperplasia                             |             |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       | 3     |       |       |       |       |          |       | 2     |       |       |       | 4 2.5  |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Tissue NOS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

GENITAL SYSTEM

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |       |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|
| Clitoral Gland              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6      |       |
| Atrophy                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 3.0 |
| Hyperkeratosis              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 2 4.0 |
| Inflammation, Suppurative   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 5 3.2 |
| Duct, Dilatation            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 5 3.8 |
| Ovary                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |       |
| Atrophy                     | 2 | 3 | 3 | 4 | 2 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 |   | 2 | 2 | 2 | 2 |   | 47 2.6 |       |
| Cyst                        |   |   |   |   |   |   |   |   | X |   | X |   | X |   | X |   |   |   | X |   |   |   |   | X |   |   | 6      |       |
| Hyperplasia, Sertoliform    |   |   |   | 4 |   |   |   |   |   |   |   |   | 3 |   |   | 2 |   |   | 4 |   |   |   |   |   | 3 |   | 6 2.8  |       |
| Hyperplasia, Tubulostromal  |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |       |
| Bilateral, Follicle, Cyst   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |       |
| Bursa, Cyst                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |       |
| Follicle, Cyst              |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4      |       |
| Granulosa Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 4.0  |       |
| Rete Ovarii, Hyperplasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |       |
| Oviduct                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|
|  | 0625        | 0730  | 0730  | 0778  | 0571  | 0553  | 0728  | 0260  | 0574  | 0496  | 0774  | 0777  | 0777  | 0575  | 0555  | 0773  | 0575  | 0463  | 0772  | 0572  |          | 0622  | 0775  | 0775  | 0779  | 0680  |
| ANIMAL ID  | 05632       | 05641 | 05642 | 05651 | 05652 | 05671 | 05672 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677    | 05677 | 05677 | 05677 | 05677 | 05677 |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Uterus                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |
| Atrophy                                  | 3 |   | 4 | 4 |   | 4 |   |   |   |   |   | 3 |   |   |   |   | 3 |   |   | 3 |   |   |   |   |   | 10 3.3 |
| Metaplasia, Squamous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5 1.4  |
| Cervix, Cyst, Squamous                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 1      |
| Endometrial Glands, Hyperplasia          |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Endometrium, Cyst                        |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |
| Endometrium, Hyperplasia                 |   |   |   |   | 1 |   | 1 | 2 | 2 |   |   | 2 |   |   |   |   | 1 | 2 | 2 |   |   |   | 2 |   | 2 | 18 1.7 |
| Endometrium, Hyperplasia, Cystic         |   | 2 |   |   |   |   |   |   |   |   | 3 |   |   | 2 | 1 | 2 |   |   |   |   |   |   | 3 |   |   | 18 2.3 |
| Lumen, Dilatation                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 3.7  |
| Vagina                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49     |
| Atrophy                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.5  |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 1 |   |   | 2 |   |   | 3 |   | 8 2.6  |
| Epithelium, Degeneration                 |   |   | 4 | 4 |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   | 1 |   |   | 2 |   |   |   | 5 3.2  |
| Epithelium, Hyperplasia                  |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 6 2.7  |
| Epithelium, Mucification                 | 4 | 4 |   |   | 4 | 4 | 2 |   | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | 4 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | 40 3.4 |
| Lumen, Dilatation                        |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0  |

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone Marrow                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49    |
| Hypocellularity                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |
| Lymph Node                                    |   |   |   | + |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   | 9     |
| Lumbar, Degeneration, Cystic                  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 3.5 |
| Lumbar, Hyperplasia, Lymphoid                 |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3.5 |
| Lumbar, Infiltration Cellular, Plasma Cell    |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 3.8 |
| Mediastinal, Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Pancreatic, Hyperplasia, Lymphoid             |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Pancreatic, Infiltration Cellular, Histiocyte |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|                                      |           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        |   |
|--------------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| DAY ON TEST                          |           | 6 | 7 | 7 | 7 | 5 | 5 | 7 | 2 | 5 | 4 | 7 | 7 | 7 | 5 | 5 | 7 | 5 | 4 | 6 | 7 | 5 | 6 | 7 | 7        | 6 |
|                                      |           | 2 | 3 | 3 | 2 | 7 | 0 | 2 | 6 | 7 | 9 | 1 | 2 | 2 | 3 | 3 | 2 | 1 | 6 | 3 | 2 | 2 | 2 | 1 | 2        | 8 |
|                                      |           | 5 | 0 | 0 | 8 | 1 | 3 | 8 | 0 | 4 | 6 | 4 | 9 | 7 | 4 | 4 | 0 | 0 | 8 | 0 | 7 | 3 | 5 | 5 | 9        | 0 |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 |
| F1 Veh. StDose F                     |           | 5 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9        | 9 |
|                                      |           | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 |
|                                      |           | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3        | 4 |
|                                      |           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2        | 2 |
|                                      |           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     |       |       |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|-------|-------|
| Popliteal, Infiltration Cellular, Plasma Cell | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     | 1 4.0 |       |
| Renal, Degeneration, Cystic                   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |     |       | 2 3.5 |
| Renal, Hyperplasia, Lymphoid                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 4 | 3 3.3 |       |
| Renal, Infiltration Cellular, Plasma Cell     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 4 | 3 3.7 |       |

|                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |       |
|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| Lymph Node, Mandibular             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4     |
| Degeneration, Cystic               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 3.7 |
| Hyperplasia, Lymphoid              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 4.0 |
| Infiltration Cellular, Plasma Cell |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 3.5 |

|                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Spleen                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49     |
| Hematopoietic Cell Proliferation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 32 2.7 |
| Hyperplasia, Lymphoid            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Pigmentation                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 31 2.2 |

|                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Thymus                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 49     |
| Atrophy                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 3.7 |
| Cyst                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1      |
| Polyarteritis                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 2.0  |
| Epithelial Cell, Hyperplasia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 3.0  |

**INTEGUMENTARY SYSTEM**

|                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |        |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|
| Mammary Gland        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50     |
| Atypical Focus       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 2.0  |
| Galactocele          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1      |
| Hyperplasia, Lobular |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 41 3.2 |
| Metaplasia, Osseous  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 3.0  |
| Alveolus, Dilatation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 2.5  |
| Duct, Dilatation     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 16 2.6 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|  | 0625        | 0730  | 0730  | 0778  | 0571  | 0553  | 0728  | 0260  | 0574  | 0496  | 0714  | 0779  | 0777  | 0574  | 0554  | 0732  | 0570  | 0468  | 0633  | 0727  |          | 0523  | 0665  | 0775  | 0778  |
| ANIMAL ID  | 05632       | 05641 | 05644 | 05651 | 05655 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677    | 05677 | 05677 | 05677 | 05677 |

|                                    |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |
|------------------------------------|--|--|--|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Skin                               |  |  |  | + | + |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 16 |     |
| Epithelium, Foot, Hyperplasia      |  |  |  |   |   | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 13 | 4.0 |
| Foot, Edema                        |  |  |  |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7  | 3.4 |
| Foot, Fibrosis                     |  |  |  |   |   | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 13 | 4.0 |
| Foot, Inflammation, Chronic Active |  |  |  |   |   | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 13 | 3.8 |
| Foot, Necrosis                     |  |  |  |   |   | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11 | 4.0 |
| Foot, Ulcer                        |  |  |  |   |   | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 12 | 4.0 |

**MUSCULOSKELETAL SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |
| Tarsal, Fibrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Tarsal, Hyperostosis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Tarsal, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Tarsal, Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Tarsal, Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Bone, Femur                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Fibrous Osteodystrophy               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |

**NERVOUS SYSTEM**

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Brain, Brain Stem     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Compression           |   |   | 1 | 3 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 15 | 2.5 |
| Brain, Cerebellum     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Brain, Cerebrum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Ventricle, Dilatation |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 1.6 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 Veh. StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0625        | 0730  | 0730  | 0778  | 0551  | 0553  | 0728  | 0260  | 0574  | 0496  | 0744  | 0779  | 0777  | 0554  | 0554  | 0732  | 0533  | 0722  | 0463  | 0772  | 0522  | 0625  | 0715  | 0729  | 0680  |          |
| ANIMAL ID  | 05632       | 05641 | 05642 | 05651 | 05652 | 05671 | 05672 | 05677 | 05678 | 05679 | 05679 | 05679 | 05679 | 05679 | 05679 | 05691 | 05692 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699    |

|                           |   |
|---------------------------|---|
| Nerve Trigeminal          | 1 |
| Peripheral Nerve, Sciatic | 1 |
| Peripheral Nerve, Tibial  | 1 |
| Spinal Cord, Cervical     | 1 |
| Spinal Cord, Lumbar       | 1 |
| Spinal Cord, Thoracic     | 1 |

**RESPIRATORY SYSTEM**

|   |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |           |           |          |            |            |
|---|---|---|--|--|---|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|--|--|---|-----------|-----------|----------|------------|------------|
| Lung  | + | + |  |  | + | + |  |  |   | + | + | + | + | + | + |   |   | + | + | + |  |  |   | +         | <b>40</b> | <b>2</b> | <b>3.5</b> |            |
| Congestion  |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |           |           |          |            |            |
| Hemorrhage  |   | 2 |  |  |   |   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |           |           |          | <b>1</b>   | <b>2.0</b> |
| Infiltration Cellular, Histiocyte                     |   |   |  |  | 4 |   |  |  |   |   |   |   |   | 1 |   |   |   |   | 2 |   |  |  |   | 1         |           |          | <b>7</b>   | <b>1.7</b> |
| Nose  | + |   |  |  | + | + |  |  |   | + | + | + | + |   |   | + | + | + | + | + |  |  |   | +         | <b>38</b> |          |            |            |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 |   |  |  |   | 3 |  |  | 3 |   |   |   |   |   |   |   |   |   |   |   |  |  |   |           |           | <b>7</b> | <b>2.0</b> |            |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |  |  |   | 3 |  |  |   |   |   |   |   |   |   |   |   |   |   |   |  |  |   |           |           | <b>1</b> | <b>3.0</b> |            |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |   |   |   | 2 |   |  |  |   |           |           | <b>1</b> | <b>2.0</b> |            |
| Upper Molar, Inflammation, Chronic Active             |   |   |  |  |   |   |  |  |   |   |   |   |   | 4 |   |   |   |   |   |   |  |  |   |           |           | <b>1</b> | <b>4.0</b> |            |
| Trachea   | + |   |  |  | + | + |  |  | + | + | + | + |   |   | + | + | + | + | + |   |  |  | + | <b>38</b> |           |          |            |            |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Date Report Requested: 08/16/2017

Test Type: CHRONIC

Bisphenol A

Time Report Requested: 10:21:03

Route: GAVAGE

CAS Number: 80-05-7

First Dose M/F: 09/25/12 / 09/25/12

Species/Strain: RATS/Sprague Dawley (NCTR)

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |          |          |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----------|----------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS FEMALE</b><br><b>F1 Veh. StDose F</b> | DAY ON TEST | 0625  | 0730  | 0730  | 0778  | 0553  | 0553  | 0728  | 0256  | 0546  | 0474  | 0779  | 0772  | 0772  | 0553  | 0553  | 0732  | 0551  | 0466  | 0732  | 0562  | 0675  | 0771  | 0776  | 0688  | 0780     | * TOTALS |          |
|   | ANIMAL ID   | 05632 | 05641 | 05642 | 05651 | 05652 | 05671 | 05672 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699    |          | * TOTALS |
|   |             | 0631  | 0632  | 0634  | 0651  | 0652  | 0661  | 0662  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0667  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669  | 0669     |          |          |
|   | 05632       | 05641 | 05642 | 05651 | 05652 | 05671 | 05672 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05677 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | 05699 | * TOTALS |          |          |

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

|                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |               |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---------------|
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b>     |               |
| Casts Protein                        |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   | 1 |   | 1 |   |   |   |   | 2 |   | <b>5 1.2</b>  |               |
| Mineralization                       |   |   | 2 | 1 |   | 2 | 1 |   |   | 1 |   | 1 |   | 1 |   | 2 | 1 | 1 |   | 1 | 1 |   | 1 |   | 2 | <b>28 1.4</b> |               |
| Nephropathy                          |   | 1 | 2 | 1 |   |   |   |   | 4 |   |   |   | 2 | 1 | 1 | 1 | 2 |   |   |   |   | 1 | 1 | 2 |   | 1             | <b>28 1.6</b> |
| Cortex, Cyst                         |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   | X |   |   | <b>7</b>      |               |
| Renal Tubule, Cyst                   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | X | <b>7</b>      |               |
| Transitional Epithelium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 2 |   |   | 1 |   |   |   |   |   |   | <b>5 1.2</b>  |               |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically                      M .. Missing tissue  
 X .. Lesion present    A .. Autolysis precludes evaluation  
 I .. Insufficient tissue    BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal    3) Moderate  
 2) Mild       4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|   | 0<br>7<br>2<br>7      | 0<br>6<br>2<br>5      | 0<br>3<br>4<br>0      | 0<br>7<br>2<br>2      | 0<br>7<br>2<br>8      | 0<br>5<br>6<br>8      | 0<br>6<br>5<br>2      | 0<br>5<br>9<br>3      | 0<br>5<br>8<br>3      | 0<br>7<br>2<br>7      | 0<br>3<br>9<br>8      | 0<br>6<br>4<br>2      | 0<br>5<br>6<br>4      | 0<br>5<br>6<br>4      | 0<br>7<br>2<br>6      | 0<br>7<br>0<br>6      | 0<br>5<br>3<br>0      | 0<br>7<br>0<br>4      | 0<br>6<br>2<br>3      | 0<br>7<br>2<br>6      | 0<br>4<br>9<br>9      | 0<br>7<br>3<br>0      | 0<br>6<br>5<br>9      |                       |           |                      |
|   | 0<br>1<br>4<br>5<br>1 | 0<br>1<br>4<br>5<br>2 | 0<br>1<br>4<br>6<br>1 | 0<br>1<br>4<br>7<br>2 | 0<br>1<br>4<br>7<br>1 | 0<br>1<br>4<br>8<br>2 | 0<br>1<br>4<br>8<br>1 | 0<br>1<br>4<br>9<br>2 | 0<br>1<br>4<br>9<br>1 | 0<br>1<br>3<br>9<br>1 | 0<br>1<br>3<br>9<br>2 | 0<br>1<br>3<br>6<br>1 | 0<br>1<br>3<br>6<br>2 | 0<br>1<br>3<br>6<br>3 | 0<br>1<br>3<br>6<br>4 | 0<br>1<br>3<br>6<br>1 | 0<br>1<br>3<br>6<br>2 | 0<br>1<br>3<br>6<br>3 | 0<br>1<br>3<br>6<br>4 | 0<br>1<br>5<br>5<br>1 | 0<br>1<br>5<br>7<br>2 | 0<br>1<br>5<br>7<br>1 | 0<br>1<br>5<br>8<br>2 | 0<br>1<br>5<br>8<br>1 |           |                      |

ALIMENTARY SYSTEM

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Esophagus                               | +     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Large, Colon                  | + A + + + + + + + + + + + + + + + + + A + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Ileum                  | + A + + + + + + + + + + + + + + + + + A + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Intestine Small, Jejunum<br>Ulcer       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liver                                   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angiectasis                             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Basophilic Focus                        | X     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clear Cell Focus                        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                    | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eosinophilic Focus                      | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fatty Change                            | 1 3 2 3 2 1 2                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hepatodiaphragmatic Nodule              | X X X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Mononuclear Cell | 2 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mineralization                          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mixed Cell Focus                        | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tension Lipidosis                       | 2 4 4 4 2 3   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vacuolization Cytoplasmic               | 2 2 2 1 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bile Duct, Hyperplasia                  | 4 1 1 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biliary Tract, Cyst                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Biliary Tract, Fibrosis                 | 2 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |      |
|---|-----------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|
|   |           | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |      |      |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | ANIMAL ID | 0727        | 0625 | 0340 | 0722 | 0778 | 0568 | 0652 | 0553 | 0573 | 0362 | 0554 | 0556 | 0723 | 0776 | 0778 | 0575 | 0774 | 0663 | 0722 | 0499 |                      | 0730 | 0675 | 0659 |      |
|   |           | 0144        | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0144 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 | 0336 |                      | 0336 | 0557 | 0557 | 0557 |

|  |   |  |  |   |   |   |   |   |  |   |   |  |   |   |   |   |  |   |   |   |   |   |   |   |   |
|--|---|--|--|---|---|---|---|---|--|---|---|--|---|---|---|---|--|---|---|---|---|---|---|---|---|
| Hepatocyte, Necrosis<br>Oval Cell, Hyperplasia   | 1   |  |  |   |   |   |   |   |  |   |   |  |   |   |   |   |  |   |   |   |   |   |   |   |   |
| Mesentery<br>Fat, Necrosis   | +   |  |  |   |   |   | 3 |   |  |   |   |  | + |   |   |   |  |   | 4 |   |   |   |   |   |   |
| Pancreas<br>Basophilic Focus<br>Infiltration Cellular, Lymphocyte<br>Inflammation, Chronic Active<br>Lipomatosis<br>Pigmentation<br>Acinus, Degeneration | +     |  |  |   |   |   |   |   |  |   |   |  |   |   |   |   |  |   |   |   |   |   |   |   |   |
|  | 3   |  |  | 1 |   | 1 | 1 | 3 |  | 1 |   |  | 3 |   | 2 | 2 |  | 3 | 2 | 1 | 3 |   | 2 | 2 | 1 |
|  | 1   |  |  |   | 1 | 1 | 2 |   |  |   | 1 |  | 1 | 1 |   | 2 |  |   | 4 |   |   | 3 | 2 | 3 | 2 |
| Stomach, Forestomach<br>Epithelium, Hyperplasia  | +     |  |  |   |   |   |   |   |  |   |   |  |   |   |   |   |  |   |   |   |   |   |   |   |   |
| Stomach, Glandular<br>Cyst Epithelial Inclusion  | + A + |  |  |   |   |   |   |   |  |   |   |  |   |   |   |   |  |   |   |   |   |   |   |   |   |

CARDIOVASCULAR SYSTEM

|                         |   |   |   |  |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------|---|---|---|--|---|---|---|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel            | + |   |   |  |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Heart<br>Cardiomyopathy | + |   |   |  |   |   |   |  |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                         | 3   | 1 | 1 |  | 2 | 1 | 3 |  | 2 | 2 | 2 |  | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 |

ENDOCRINE SYSTEM

|                               |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Adrenal Cortex<br>Angiectasis | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                               | 2 4 2 3 3                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F   | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|
|   | 0<br>7<br>2<br>7 | 0<br>6<br>2<br>5 | 0<br>3<br>4<br>0 | 0<br>7<br>2<br>2 | 0<br>7<br>2<br>8 | 0<br>5<br>6<br>8 | 0<br>6<br>5<br>2 | 0<br>5<br>9<br>3 | 0<br>5<br>8<br>3 | 0<br>7<br>2<br>7 | 0<br>3<br>9<br>8 | 0<br>6<br>4<br>2 | 0<br>5<br>6<br>4 | 0<br>5<br>6<br>4 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>6 | 0<br>5<br>3<br>8 | 0<br>7<br>0<br>4 | 0<br>6<br>2<br>3 | 0<br>7<br>2<br>6 |           |                      | 0<br>4<br>9<br>0 | 0<br>7<br>3<br>0 | 0<br>6<br>5<br>9 |
| Degeneration, Cystic<br>Hyperplasia<br>Vacuolization Cytoplasmic  |                  |                  |                  | 2                | 4                | 2                | 2                | 1                | 2                | 2                |                  |                  |                  | 2                | 2                | 2                | 1                |                  |                  | 2                | 3         |                      | 1                |                  | 4                |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |           |                      | 2                | 1                |                  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                | 2                |           |                      |                  |                  |                  |
| Adrenal Medulla<br>Hyperplasia  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |                  |
|   |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |           |                      |                  | 3                |                  |
| Islets, Pancreatic  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |                  |
| Parathyroid Gland<br>Hyperplasia  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |                  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           | 2                    |                  |                  |                  |
| Pituitary Gland<br>Angiectasis<br>Hemorrhage<br>Pigmentation<br>Pars Distalis, Cyst<br>Pars Distalis, Hyperplasia<br>Pars Distalis, Hypertrophy | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |                  |
|   | 4                |                  |                  |                  |                  | 3                |                  |                  |                  |                  | 4                |                  |                  |                  |                  | 4                |                  |                  |                  | 4                |           |                      |                  |                  |                  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |           |                      |                  |                  |                  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  | X                |                  |                  |                  |                  | X                |                  |                  |           |                      |                  | X                |                  |
|   |                  | 2                |                  |                  | 4                | 4                |                  | 3                | 3                |                  |                  | 3                | 4                | 4                | 4                | 4                |                  | 2                |                  |                  | 4         | 3                    | 3                | 2                | 4                |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  | 2                |                  |
| Thyroid Gland<br>Ultimobranchial Cyst<br>C-cell, Hyperplasia<br>Follicular Cell, Hyperplasia  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                | +                |                  |
|   |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                | X                |                  |           |                      |                  |                  |                  |
|   | 1                | 2                |                  |                  |                  |                  | 4                | 2                | 2                | 1                | 1                |                  | 1                | 2                |                  |                  | 2                | 1                |                  | 1                |           |                      |                  | 1                |                  |
|   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  | 2         |                      |                  |                  |                  |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|
|   | 0<br>7<br>2<br>7 | 0<br>6<br>2<br>5 | 0<br>3<br>4<br>0 | 0<br>7<br>2<br>2 | 0<br>7<br>2<br>8 | 0<br>5<br>6<br>8 | 0<br>6<br>5<br>2 | 0<br>5<br>9<br>3 | 0<br>5<br>8<br>3 | 0<br>7<br>2<br>7 | 0<br>3<br>9<br>8 | 0<br>6<br>4<br>2 | 0<br>5<br>6<br>4 | 0<br>5<br>6<br>4 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>6 | 0<br>5<br>0<br>8 | 0<br>7<br>3<br>4 | 0<br>6<br>2<br>3 | 0<br>7<br>2<br>6 |           |                      | 0<br>4<br>9<br>0 |
| Clitoral Gland  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Hyperkeratosis  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Inflammation, Suppurative                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Inflammation, Chronic Active                            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Duct, Dilatation  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Ovary   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Atrophy   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    | +                |
| Cyst  | 3                | 2                |                  | 2                | 2                | 2                | 2                | 2                | 2                | 3                | 2                | 2                | 4                | 2                | 3                | 3                | 3                | 3                | 3                | 2                | 2         | 2                    | 2                |
| Hyperplasia, Sertoliform                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Bilateral, Follicle, Cyst                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Bursa, Cyst   | X                |                  |                  |                  |                  | X                |                  |                  |                  | X                | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |           | 3                    |                  |
| Follicle, Cyst  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Granulosa Cell, Hyperplasia                             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Interstitial Cell, Hyperplasia                          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Oviduct   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Uterus  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Atrophy   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         | +                    |                  |
| Metaplasia, Squamous                                    | 3                |                  |                  | 3                |                  |                  |                  |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  | 3                |                  |                  |           |                      |                  |
| Endometrium, Hyperplasia                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Endometrium, Hyperplasia, Cystic                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Lumen, Dilatation                                       | 4                |                  | 1                |                  | 2                | 2                |                  |                  | 2                | 1                | 1                |                  | 3                | 2                |                  | 2                |                  | 2                |                  | 2                | 2         | 2                    |                  |
| Vagina  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Infiltration Cellular, Polymorphonuclear                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Epithelium, Degeneration                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |
| Epithelium, Hyperplasia                                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |                  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|
|   | 0<br>7<br>2<br>7 | 0<br>6<br>2<br>5 | 0<br>3<br>4<br>0 | 0<br>7<br>2<br>2 | 0<br>7<br>2<br>8 | 0<br>5<br>6<br>8 | 0<br>6<br>5<br>2 | 0<br>5<br>9<br>3 | 0<br>5<br>8<br>3 | 0<br>7<br>2<br>7 | 0<br>3<br>9<br>8 | 0<br>6<br>4<br>2 | 0<br>5<br>6<br>4 | 0<br>5<br>6<br>4 | 0<br>7<br>2<br>6 | 0<br>7<br>2<br>6 | 0<br>5<br>3<br>8 | 0<br>7<br>0<br>4 | 0<br>6<br>2<br>3 | 0<br>7<br>2<br>6 |           |                      | 0<br>4<br>9<br>0 | 0<br>7<br>3<br>0 | 0<br>6<br>5<br>9 |
| Epithelium, Mucification                                | 3                | 4                | 4                | 4                | 2                | 3                | 2                | 3                | 4                | 2                | 4                | 3                | 3                | 3                | 4                | 3                | 4                | 2                | 3                | 4                | 4         | 3                    | 4                |                  |                  |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow Hypocellularity                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |
| Lymph Node Lumbar, Degeneration, Cystic                   | + |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |  |
| Lymph Node Lumbar, Hyperplasia, Lymphoid                  | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3 |   |   |   |  |
| Lymph Node Lumbar, Infiltration Cellular, Plasma Cell     | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |  |
| Lymph Node, Mandibular Degeneration, Cystic               |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |  |
| Lymph Node, Mandibular Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |  |
| Lymph Node, Mandibular Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lymph Node, Mesenteric                                    |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Spleen Hematopoietic Cell Proliferation                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |
| Spleen Hematopoietic Cell Proliferation Pigmentation      | 3 | 3 |   | 1 | 3 | 4 | 3 | 3 | 2 |   | 3 |   | 2 | 4 | 3 |   | 3 |   |   | 3 | 2 | 1 | 2 | 3 |   |  |
| Spleen Hematopoietic Cell Proliferation Pigmentation      | 3 | 2 |   | 2 | 1 |   |   | 2 | 3 | 4 |   |   | 2 |   | 1 | 2 |   | 4 | 4 |   | 1 | 1 | 1 |   |   |  |
| Thymus Atrophy  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |
| Thymus Atrophy Cyst                                       | 4 | 4 |   | 4 | 4 | 3 |   | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | X |  |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Mammary Gland Atypical Focus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID | females<br>(cont...) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|----------------------|
|   | 0<br>7<br>2<br>7      | 0<br>6<br>2<br>5      | 0<br>3<br>4<br>0      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>8      | 0<br>5<br>6<br>8      | 0<br>6<br>5<br>2      | 0<br>5<br>9<br>3      | 0<br>5<br>8<br>3      | 0<br>7<br>2<br>7      | 0<br>3<br>9<br>8      | 0<br>6<br>4<br>2      | 0<br>5<br>6<br>4      | 0<br>5<br>6<br>4      | 0<br>7<br>2<br>6      | 0<br>7<br>0<br>6      | 0<br>5<br>3<br>8      | 0<br>7<br>0<br>4      | 0<br>6<br>2<br>3      | 0<br>7<br>2<br>6      | 0<br>4<br>9<br>0      | 0<br>7<br>3<br>0      | 0<br>6<br>5<br>9      |                       |           |                      |
|   | 0<br>1<br>4<br>5<br>1 | 0<br>1<br>4<br>5<br>2 | 0<br>1<br>4<br>6<br>1 | 0<br>1<br>4<br>7<br>2 | 0<br>1<br>4<br>7<br>1 | 0<br>1<br>4<br>8<br>2 | 0<br>1<br>4<br>8<br>1 | 0<br>1<br>4<br>9<br>2 | 0<br>1<br>4<br>9<br>1 | 0<br>1<br>4<br>9<br>2 | 0<br>3<br>6<br>1<br>2 | 0<br>3<br>6<br>1<br>2 | 0<br>3<br>6<br>2<br>2 | 0<br>3<br>6<br>3<br>1 | 0<br>3<br>6<br>3<br>2 | 0<br>3<br>6<br>4<br>1 | 0<br>3<br>6<br>4<br>2 | 0<br>3<br>6<br>5<br>1 | 0<br>3<br>6<br>5<br>2 | 0<br>5<br>7<br>7<br>1 | 0<br>5<br>7<br>8<br>2 | 0<br>5<br>7<br>8<br>1 | 0<br>5<br>7<br>8<br>2 | 0<br>5<br>7<br>9<br>1 |           |                      |

Hyperplasia, Lobular Mineralization 3 4 4 4 4 4 2 4 3 2 3 4 4 4 3 2 4 2

Alveolus, Dilatation 2

Duct, Dilatation 2

Skin + + + + +

Epithelium, Foot, Hyperplasia 4 4 4

Foot, Edema 4 4 4

Foot, Fibrosis 4 4 4

Foot, Inflammation, Chronic Active 4 4 4

Foot, Necrosis 4 4 4

Foot, Ulcer 4 2 4

Subcutaneous Tissue, Fibrosis 3

MUSCULOSKELETAL SYSTEM

Bone, Femur +

NERVOUS SYSTEM

Brain, Brain Stem +

Compression 2 1 3 3 1 4 4

Hemorrhage 4

Brain, Cerebellum +

Brain, Cerebrum +

Ventricle, Dilatation 2 1 1

Nerve Trigeminal +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

|  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                              |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |                              |   |
|  | 7           | 6 | 3 | 7 | 7 | 5 | 6 | 5 | 5 | 7 | 3 | 6 | 5 | 5 | 5 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 4 | 7 | 6                            |   |
| <b>F1 2.5 StDose F</b>                       | 2           | 2 | 4 | 2 | 2 | 6 | 5 | 9 | 8 | 2 | 9 | 4 | 6 | 6 | 2 | 2 | 0 | 3 | 0 | 2 | 2 | 9 | 3 | 5 | 9                            |   |
|  | 7           | 5 | 0 | 2 | 8 | 8 | 2 | 3 | 3 | 7 | 8 | 2 | 4 | 4 | 3 | 6 | 6 | 7 | 8 | 4 | 3 | 6 | 9 | 0 | 9                            |   |
|  | ANIMAL ID   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>females<br/>(cont...)</b> |   |
| 0  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                              | 0 |
| 1  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 |                              | 5 |
| 4  | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |                              | 7 |
| 5  | 5           | 6 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 |                              | 9 |
| 1  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2                            |   |

Axon, Degeneration 1

Peripheral Nerve, Sciatic +

Peripheral Nerve, Tibial +

Spinal Cord, Cervical  
Axon, Degeneration +

Spinal Cord, Lumbar  
Axon, Degeneration +  
2

Spinal Cord, Thoracic  
Axon, Degeneration +

### RESPIRATORY SYSTEM

Lung + + + + + + + + + + + + + + + + + +

Congestion

Foreign Body

Infiltration Cellular, Histiocyte

Inflammation, Chronic Active

Metaplasia, Osseous

2

1

Nose + + + + + + + + + + + A + + + +

Olfactory Epithelium, Accumulation, Hyaline

Droplet

Respiratory Epithelium, Accumulation, Hyaline

Droplet

1

2

3

2

3

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A  
CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(cont...) |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|---|---|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                      | 0 | 0 | 0 |
|   | 7           | 6 | 3 | 7 | 7 | 5 | 6 | 5 | 5 | 7 | 3 | 6 | 5 | 5 | 5 | 7 | 7 | 7 | 5 | 7 | 6         | 7                    | 4 | 7 | 6 |
|   | 2           | 2 | 4 | 2 | 2 | 6 | 5 | 9 | 8 | 2 | 9 | 4 | 6 | 6 | 2 | 2 | 0 | 3 | 0 | 2 | 2         | 9                    | 3 | 5 |   |
|   | 7           | 5 | 0 | 2 | 8 | 8 | 2 | 3 | 3 | 7 | 8 | 2 | 4 | 4 | 3 | 6 | 6 | 7 | 8 | 4 | 3         | 6                    | 9 | 9 |   |

Respiratory Epithelium, Hyperplasia, Goblet Cell

|                                   |   |   |   |  |   |   |   |   |  |   |   |   |   |   |  |  |  |  |  |   |   |   |   |  |   |
|-----------------------------------|---|---|---|--|---|---|---|---|--|---|---|---|---|---|--|--|--|--|--|---|---|---|---|--|---|
| Trachea                           |   |   |   |  |   |   |   |   |  |   |   |   |   |   |  |  |  |  |  |   |   |   |   |  |   |
| Infiltration Cellular, Lymphocyte | + | A | + |  | + | + | + | + |  | + | + | + | + | + |  |  |  |  |  | + | + | + | + |  | + |

### SPECIAL SENSES SYSTEM

Zymbal's Gland  
Inflammation, Suppurative Duct, Dilatation

### URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Accumulation, Hyaline Droplet            |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Casts Protein                            |   |   |   |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                           |   |   |   |   | 1 |   | 2 |   |   |   | 1 |   |   | 2 | 1 | 2 |   |   |   |   | 1 | 2 |   | 1 |
| Nephropathy                              | 4 |   |   |   |   |   |   |   | 2 | 1 |   | 2 |   |   | 1 |   |   |   | 1 | 2 |   |   |   | 1 |
| Cortex, Cyst                             | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   | X | X | X |
| Pelvis, Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |
| Renal Tubule, Cyst                       | X | X |   |   | X |   |   |   |   | X |   |   | X | X | X | X | X |   |   |   |   |   | X |   |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |

Urinary Bladder Lumen, Dilatation

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically    M .. Missing tissue  
X .. Lesion present    A .. Autolysis precludes evaluation  
I .. Insufficient tissue    BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | * TOTALS |          |
|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|   | 07<br>25    | 05<br>62 | 04<br>85 | 06<br>16 | 05<br>06 | 07<br>03 | 06<br>05 | 06<br>25 | 05<br>94 | 06<br>16 | 05<br>82 | 07<br>71 | 06<br>62 | 05<br>91 | 04<br>24 | 07<br>47 | 04<br>24 | 07<br>29 | 04<br>79 | 07<br>29 | 06<br>44 | 05<br>74 | 04<br>88 | 04<br>75 |          | 04<br>01 |
| ANIMAL ID   | 05792       | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    | 05792    |

**ALIMENTARY SYSTEM**

|   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Esophagus                               | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 38 |       |
| Intestine Large, Colon                  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 34 |       |
| Intestine Small, Ileum                  | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 34 |       |
| Intestine Small, Jejunum<br>Ulcer       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 1 2.0 |
| Liver                                   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |       |
| Angiectasis                             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6  | 1.8   |
| Basophilic Focus                        | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 26 |       |
| Clear Cell Focus                        | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10 |       |
| Cyst                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |       |
| Degeneration, Cystic                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 1.0   |
| Eosinophilic Focus                      |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |       |
| Fatty Change                            | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 17 | 2.4   |
| Hematopoietic Cell Proliferation        | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 2.0   |
| Hepatodiaphragmatic Nodule              | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5  |       |
| Infiltration Cellular, Mononuclear Cell | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 28 | 1.4   |
| Inflammation, Chronic Active            | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 1.3   |
| Mineralization                          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 1.5   |
| Mixed Cell Focus                        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |       |
| Tension Lipidosis                       | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 13 | 3.2   |
| Vacuolization Cytoplasmic               | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 19 | 1.6   |
| Bile Duct, Hyperplasia                  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11 | 2.1   |
| Biliary Tract, Cyst                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |       |
| Biliary Tract, Fibrosis                 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6  | 1.7   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |     |     |     |     |   |  |    |     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----|-----|-----|-----|---|--|----|-----|
|   | 0<br>7<br>2<br>5      | 0<br>5<br>6<br>2      | 0<br>4<br>8<br>5      | 0<br>6<br>1<br>6      | 0<br>5<br>6<br>2      | 0<br>7<br>0<br>3      | 0<br>6<br>0<br>5      | 0<br>6<br>2<br>5      | 0<br>5<br>9<br>4      | 0<br>6<br>1<br>6      | 0<br>5<br>8<br>2      | 0<br>7<br>6<br>7      | 0<br>6<br>5<br>1      | 0<br>4<br>2<br>4      | 0<br>7<br>4<br>7      | 0<br>4<br>2<br>4      | 0<br>7<br>2<br>9      | 0<br>4<br>7<br>9      | 0<br>6<br>1<br>4      | 0<br>5<br>7<br>4      |                       | 0<br>4<br>2<br>8      | 0<br>4<br>7<br>5      | 0<br>4<br>0<br>1      |     |     |     |     |   |  |    |     |
| ANIMAL ID   | 0<br>5<br>7<br>9<br>2 | 0<br>5<br>8<br>0<br>1 | 0<br>5<br>8<br>0<br>1 | 0<br>5<br>8<br>1<br>1 | 0<br>5<br>7<br>0<br>2 | 0<br>7<br>7<br>0<br>1 | 0<br>7<br>7<br>0<br>2 | 0<br>7<br>7<br>1<br>1 | 0<br>7<br>7<br>1<br>2 | 0<br>7<br>7<br>1<br>2 | 0<br>7<br>7<br>2<br>2 | 0<br>7<br>7<br>3<br>3 | 0<br>7<br>7<br>4<br>4 | 0<br>7<br>7<br>4<br>4 | 0<br>9<br>5<br>5<br>2 | 0<br>9<br>5<br>5<br>2 | 0<br>9<br>5<br>5<br>6 | 0<br>9<br>5<br>5<br>6 | 0<br>9<br>5<br>6<br>1 | 0<br>9<br>5<br>6<br>2 | 0<br>9<br>5<br>7<br>1 | 0<br>9<br>5<br>7<br>2 | 0<br>9<br>5<br>8<br>1 | 0<br>9<br>5<br>8<br>2 |     |     |     |     |   |  |    |     |
| Hepatocyte, Necrosis                                    | 2                     |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     | 1.3                   |     |     |     |     |   |  |    |     |
| Oval Cell, Hyperplasia                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1.0                   |                       |                       |     |     |     |     |   |  |    |     |
| Mesentery   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 3                     |                       |                       |     |     |     |     |   |  |    |     |
| Fat, Necrosis   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 3                     | 3.7                   |                       |     |     |     |     |   |  |    |     |
| Pancreas  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 49                    |                       |                       |     |     |     |     |   |  |    |     |
| Basophilic Focus  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     | 2                     |                       |                       |     |     |     |     |   |  |    |     |
| Infiltration Cellular, Lymphocyte                       | 2                     | 1                     | 1                     |                       | 2                     | 1                     |                       | 1                     |                       | 2                     | 2                     | 3                     | 1                     |                       | 1                     | 1                     | 1                     |                       | 2                     | 1                     |                       | 2                     |                       |                       | 32  | 1.7 |     |     |   |  |    |     |
| Inflammation, Chronic Active                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 2.0                   |                       |     |     |     |     |   |  |    |     |
| Lipomatosis   | 3                     |                       |                       | 2                     | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |     | 3   | 6   | 2.7 |   |  |    |     |
| Pigmentation  | 1                     |                       | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1   | 13  | 1.1 |     |   |  |    |     |
| Acinus, Degeneration                                    | 3                     | 1                     | 1                     |                       | 2                     | 2                     |                       |                       | 2                     | 3                     | 3                     | 1                     |                       | 1                     | 1                     | 1                     | 2                     | 3                     | 1                     |                       | 4                     | 3                     |                       | 34                    | 2.3 |     |     |     |   |  |    |     |
| Stomach, Forestomach                                    |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 38                    |                       |                       |     |     |     |     |   |  |    |     |
| Epithelium, Hyperplasia                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 1                     | 2.0                   |                       |     |     |     |     |   |  |    |     |
| Stomach, Glandular                                      |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 36                    |                       |                       |     |     |     |     |   |  |    |     |
| Cyst Epithelial Inclusion                               |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     | 1                     |                       |                       |     |     |     |     |   |  |    |     |
| <b>CARDIOVASCULAR SYSTEM</b>                            |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |     |     |     |   |  |    |     |
| Blood Vessel  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 50                    |                       |                       |     |     |     |     |   |  |    |     |
| Heart   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 50                    |                       |                       |     |     |     |     |   |  |    |     |
| Cardiomyopathy  | 2                     | 1                     | 1                     |                       | 1                     | 1                     | 1                     | 2                     |                       | 1                     | 1                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     | 1                     | 2                     | 2   | 1   | 1   |     | 1 |  | 37 | 1.5 |
| <b>ENDOCRINE SYSTEM</b>                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |     |     |     |     |   |  |    |     |
| Adrenal Cortex  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 49                    |                       |                       |     |     |     |     |   |  |    |     |
| Angiectasis   | 2                     |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2   | 3   | 10  | 2.5 |   |  |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |     |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|-----|-----|
|   | 0725        | 0726  | 0728  | 0721  | 0726  | 0727  | 0726  | 0726  | 0725  | 0726  | 0725  | 0727  | 0726  | 0725  | 0724  | 0727  | 0724  | 0727  | 0724  | 0727  | 0726  | 0725  | 0724  | 0724  |          | 0724 |     |     |
| ANIMAL ID   | 05792       | 05781 | 05788 | 05788 | 05788 | 05770 | 05777 | 05777 | 05777 | 05777 | 05777 | 05777 | 05777 | 05777 | 05777 | 05799 | 05799 | 05799 | 05799 | 05799 | 05799 | 05799 | 05799 | 05799 | 05799    |      |     |     |
| Degeneration, Cystic Hyperplasia                        | 3           | 1     | 4     |       |       | 3     | 4     |       |       | 4     | 2     | 2     | 2     | 2     | 2     |       |       | 2     |       |       | 4     |       |       |       |          | 28   | 2.4 |     |
| Vacuolization Cytoplasmic                               |             |       |       | 4     |       |       |       |       |       |       |       |       |       | 3     |       |       |       | 3     |       |       |       |       |       |       |          | 5    | 2.4 |     |
| Adrenal Medulla Hyperplasia                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |     |     |
| Islets, Pancreatic                                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |     |     |
| Parathyroid Gland Hyperplasia                           | +           | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 49   |     |     |
| Pituitary Gland Angiectasis                             |             |       |       |       |       |       |       |       |       |       |       |       | 4     | 4     |       |       |       |       | 4     |       |       | 4     | 4     |       | 4        | 11   | 3.9 |     |
| Pituitary Gland Hemorrhage                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |          | 2    | 4.0 |     |
| Pituitary Gland Pigmentation                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    | 2.0 |     |
| Pituitary Gland Pars Distalis, Cyst                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | X     | 6        |      |     |     |
| Pituitary Gland Pars Distalis, Hyperplasia              | 4           | 4     | 4     | 4     | 4     | 4     | 3     | 3     |       | 3     |       |       |       | 3     |       | 4     | 3     |       | 2     | 2     |       |       | 4     | 3     | 32       | 3.3  |     |     |
| Pituitary Gland Pars Distalis, Hypertrophy              |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2    | 2.0 |     |
| Thyroid Gland Ultimobranchial Cyst                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | A     |       |       |       |       |       |       |          | 49   |     |     |
| Thyroid Gland C-cell, Hyperplasia                       | 1           | 1     | 2     |       | 2     | 1     | 1     |       |       | 2     | 1     | 1     |       | 2     |       |       |       |       |       | 2     | 2     |       | 3     | 4     | 1        | 1    | 29  | 1.7 |
| Thyroid Gland Follicular Cell, Hyperplasia              |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |          | 4    | 1.8 |     |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |      |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|------|-----|
|   | 0725        | 0726  | 0728  | 0731  | 0732  | 0733  | 0734  | 0735  | 0736  | 0737  | 0738  | 0739  | 0740  | 0741  | 0742  | 0743  | 0744  | 0745  | 0746  | 0747  |          |       | 0748  | 0749  | 0750 |     |
| ANIMAL ID   | 05792       | 05581 | 05555 | 05555 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577    | 05577 | 05577 | 05577 |      |     |
| Epithelium, Mucification                                | 4           | 4     | 3     | 3     | 2     | 3     | 4     | 3     | 1     | 4     | 4     | 4     | 4     | 4     | 4     | 3     |       | 4     | 2     | 2     | 4        | 3     | 4     | 4     | 46   | 3.3 |

HEMATOPOIETIC SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|--|
| Bone Marrow Hypocellularity                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | 49 | 3  | 3.7 |  |
| Lymph Node Lumbar, Degeneration, Cystic                   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | 6  | 1  | 4.0 |  |
| Lymph Node Lumbar, Hyperplasia, Lymphoid                  | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 5  | 5  | 3.6 |  |
| Lymph Node Lumbar, Infiltration Cellular, Plasma Cell     | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 5  | 5  | 3.8 |  |
| Lymph Node, Mandibular Degeneration, Cystic               |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   | 5  | 2  | 3.5 |  |
| Lymph Node, Mandibular Hyperplasia, Lymphoid              |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 3 | 3 |   |   |   |   |   |   |   | 3  | 3  | 3.3 |  |
| Lymph Node, Mandibular Infiltration Cellular, Plasma Cell |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   | 3 | 2 |   |   |   |   |   |   |   | 3  | 3  | 3.0 |  |
| Lymph Node, Mesenteric                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |     |  |
| Spleen Hematopoietic Cell Proliferation                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 33 | 2.6 |  |
| Spleen Pigmentation                                       | 1 | 2 | 2 | 1 |   | 1 | 1 |   | 2 |   | 1 | 2 | 4 |   | 3 | 2 |   | 4 | 1 |   | 4 | 2 | 4 | 2 | 2  | 34 | 2.2 |  |
| Thymus Atrophy  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 48 | 3.8 |  |
| Thymus Cyst   | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 2 | 3  | 3  | 1   |  |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Mammary Gland Atypical Focus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2 | 2.5 |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |     |     |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|-----|
|   | 0725        | 0726  | 0728  | 0731  | 0732  | 0733  | 0734  | 0735  | 0736  | 0737  | 0738  | 0739  | 0740  | 0741  | 0742  | 0743  | 0744  | 0745  | 0746  | 0747  | 0748  | 0749  | 0750  | 0751  | 0752  |          |     |     |
| ANIMAL ID   | 05792       | 05581 | 05552 | 05555 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 |          |     |     |
| Hyperplasia, Lobular Mineralization                     | 3           | 4     |       | 3     | 3     | 4     |       | 2     | 2     | 3     | 4     | 4     | 4     | 4     | 3     | 3     | 3     | 4     |       | 4     | 4     | 2     | 2     | 4     | 3     | 40       | 3.3 |     |
| Alveolus, Dilatation                                    |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       | 2     |       | 2     |       |       | 4        | 2.0 |     |
| Duct, Dilatation  |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 2     |       |       |       |       |       | 2     |       | 2     |       |       | 5        | 2.0 |     |
| Skin  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 8        |     |     |
| Epithelium, Foot, Hyperplasia                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5        | 4.0 |     |
| Foot, Edema   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 4.0 |     |
| Foot, Fibrosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5        | 4.0 |     |
| Foot, Inflammation, Chronic Active                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5        | 4.0 |     |
| Foot, Necrosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        | 4.0 |     |
| Foot, Ulcer   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        | 3.5 |     |
| Subcutaneous Tissue, Fibrosis                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        | 3.0 |     |
| <b>MUSCULOSKELETAL SYSTEM</b>                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |     |     |
| Bone, Femur   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50  |     |
| <b>NERVOUS SYSTEM</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |     |     |
| Brain, Brain Stem                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50  |     |
| Compression   |             |       |       |       |       |       |       |       |       |       |       |       | 4     | 2     |       | 3     |       |       |       |       | 2     |       |       | 3     | 3     | 2        | 14  | 2.6 |
| Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2   | 3.0 |
| Brain, Cerebellum                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50  |     |
| Brain, Cerebrum   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50  |     |
| Ventricle, Dilatation                                   |             |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       | 1     |       |       |       |       |       |       |       |       |       |          | 5   | 1.2 |
| Nerve Trigeminal  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3   |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|------|
|   | 0725        | 0726  | 0728  | 0731  | 0732  | 0733  | 0734  | 0735  | 0736  | 0737  | 0738  | 0739  | 0740  | 0741  | 0742  | 0743  | 0744  | 0745  | 0746  | 0747  |          | 0748  | 0749 |
| ANIMAL ID   | 05792       | 05581 | 05582 | 05583 | 05584 | 05585 | 05586 | 05587 | 05588 | 05589 | 05590 | 05591 | 05592 | 05593 | 05594 | 05595 | 05596 | 05597 | 05598 | 05599 | 05600    | 05601 |      |

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |     |     |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|-----|-----|
| Axon, Degeneration                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 1.0 |     |
| Peripheral Nerve, Sciatic                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |     |     |
| Peripheral Nerve, Tibial                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |     |     |
| Spinal Cord, Cervical<br>Axon, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 1   | 1.0 |
| Spinal Cord, Lumbar<br>Axon, Degeneration   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 3   | 1.3 |
| Spinal Cord, Thoracic<br>Axon, Degeneration |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 1   | 1.0 |

**RESPIRATORY SYSTEM**

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Lung  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 40 |     |
| Congestion  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 4.0 |
| Foreign Body  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  |     |
| Infiltration Cellular, Histiocyte                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5  | 1.6 |
| Inflammation, Chronic Active                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 2.0 |
| Metaplasia, Osseous                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 1.0 |
| Nose  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 36 |     |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11 | 2.5 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 2.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2.5 StDose F | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | * TOTALS |          |          |          |          |
|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|   | 07<br>25    | 05<br>62 | 04<br>82 | 06<br>15 | 05<br>62 | 07<br>03 | 06<br>05 | 06<br>25 | 05<br>94 | 06<br>16 | 05<br>27 | 06<br>61 | 05<br>82 | 07<br>21 | 06<br>59 | 04<br>24 | 07<br>47 | 04<br>29 | 07<br>99 | 06<br>44 |          | 05<br>58 | 04<br>28 | 04<br>45 | 04<br>40 |
| ANIMAL ID   | 05792       | 05801    | 05802    | 05801    | 05801    | 05807    | 05807    | 05807    | 05807    | 05807    | 05807    | 05807    | 05807    | 05807    | 05807    | 05809    | 05809    | 05809    | 05809    | 05809    | 05809    | 05809    | 05809    | 05809    | 05809    |

Respiratory Epithelium, Hyperplasia, Goblet Cell 2 1 2.0

Trachea Infiltration Cellular, Lymphocyte + + + + + + + + + + + A + + + + + + + 36 1 3.0

**SPECIAL SENSES SYSTEM**

Zymbal's Gland Inflammation, Suppurative Duct, Dilatation + 4 4 1 1 1 4.0 4.0 4.0

**URINARY SYSTEM**

Kidney + 50

Accumulation, Hyaline Droplet 2 4.0

Casts Protein 5 1.2

Infiltration Cellular, Lymphocyte 1 1.0

Infiltration Cellular, Mononuclear Cell 1 1.0

Infiltration Cellular, Polymorphonuclear 1 1.0

Mineralization 1 1 2 1 1 1 1 4 2 4 1 1 1 1 2 3 2 22 1.4

Nephropathy 1 2 1 1 1 1 4 2 4 1 1 1 1 3 1 1 3 1 25 1.7

Cortex, Cyst X X X 10

Pelvis, Dilatation X X 1 4.0

Renal Tubule, Cyst X X 15

Transitional Epithelium, Hyperplasia 1 1 1 6 1.0

Urinary Bladder Lumen, Dilatation 1 1 4.0

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |   |   |
|--|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|---|---|
|  |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 |   |   |   |
|  |  | 5           | 5 | 6 | 6 | 7 | 4 | 7 | 7 | 5 | 7 | 7 | 5 | 6 | 7 | 6 | 6 | 7 | 3 | 7 | 6 |                      | 6 | 5 | 6 | 4 |
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> |  | 2           | 7 | 1 | 4 | 0 | 4 | 2 | 0 | 6 | 2 | 2 | 4 | 2 | 2 | 6 | 0 | 2 | 4 | 0 | 0 | 6                    | 2 | 6 | 5 |   |
|  |  | 9           | 1 | 3 | 5 | 6 | 7 | 9 | 9 | 9 | 8 | 8 | 1 | 5 | 5 | 8 | 1 | 8 | 0 | 8 | 8 | 9                    | 4 | 3 | 9 | 2 |
| <b>F1 25.0 StDose F</b>                      |  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 | 0 |   |
|  |  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5                    | 5 | 5 | 5 | 5 |
|  |  | 6           | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 9                    | 9 | 9 | 9 | 9 |
|  |  | 1           | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 3                    | 3 | 4 | 4 | 5 |
|  |  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                    | 2 | 1 | 2 | 1 |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + | + | + | + | + |   | + | + |   |   | + | + |   | + | + |   | + | + | + | + | + | + | + | + |   |
| Intestine Large, Colon                  | + | + | + | + | + | + |   | + | A |   |   | + | + |   | + | + |   | + | + | + | + | + | + | + | + |   |
| Intestine Small, Ileum                  | + | + | + | + | + | + |   | + | A |   |   | + | + |   | + | A |   | + | + | + | + | + | + | + | + |   |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Angiectasis                             |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                        |   | X |   | X | X |   |   | X | X | X | X |   | X | X |   |   | X |   | X | X |   |   |   | X |   |   |
| Clear Cell Focus                        |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |
| Degeneration, Cystic                    |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |
| Fatty Change                            | 2 |   |   |   |   |   |   | 1 |   |   |   | 3 |   |   | 2 |   |   | 2 | 2 |   |   |   | 3 | 4 |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |
| Hemorrhage                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 1 |   |   |   | 1 |   |   | 2 |   | 2 | 2 | 1 | 1 | 1 |   | 1 | 1 |   | 1 | 2 | 1 | 1 | 1 | 1 | 1 |   |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Vacuolization Cytoplasmic               |   | 2 | 1 | 2 |   |   |   |   |   | 2 |   | 2 |   | 1 |   | 1 |   | 2 |   |   | 1 | 1 |   | 2 |   |   |
| Bile Duct, Hyperplasia                  | 2 |   |   |   |   | 1 |   | 1 |   | 2 | 3 |   | 1 | 2 |   | 1 |   |   |   | 3 |   |   |   | 2 |   |   |
| Biliary Tract, Fibrosis                 |   |   |   |   |   |   |   |   |   | 1 | 2 |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Oral Mucosa                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|  | 0529        | 0571 | 0613 | 0665 | 0707 | 0749 | 0791 | 0833 | 0875 | 0917 | 0959 | 1001 | 1043 | 1085 | 1127 | 1169 | 1211 | 1253 | 1295 | 1337 |           |                      | 1379 | 1421 | 1463 | 1505 | 1547 | 1589 | 1631 | 1673 | 1715 | 1757 | 1799 | 1841 | 1883 | 1925 | 1967 | 2009 | 2051 | 2093 | 2135 | 2177 | 2219 | 2261 | 2303 | 2345 | 2387 | 2429 | 2471 | 2513 | 2555 | 2597 | 2639 | 2681 | 2723 | 2765 | 2807 | 2849 | 2891 | 2933 | 2975 | 3017 | 3059 | 3101 | 3143 | 3185 | 3227 | 3269 | 3311 | 3353 | 3395 | 3437 | 3479 | 3521 | 3563 | 3605 | 3647 | 3689 | 3731 | 3773 | 3815 | 3857 | 3899 | 3941 | 3983 | 4025 | 4067 | 4109 | 4151 | 4193 | 4235 | 4277 | 4319 | 4361 | 4403 | 4445 | 4487 | 4529 | 4571 | 4613 | 4655 | 4697 | 4739 | 4781 | 4823 | 4865 | 4907 | 4949 | 4991 | 5033 | 5075 | 5117 | 5159 | 5201 | 5243 | 5285 | 5327 | 5369 | 5411 | 5453 | 5495 | 5537 | 5579 | 5621 | 5663 | 5705 | 5747 | 5789 | 5831 | 5873 | 5915 | 5957 | 5999 | 6041 | 6083 | 6125 | 6167 | 6209 | 6251 | 6293 | 6335 | 6377 | 6419 | 6461 | 6503 | 6545 | 6587 | 6629 | 6671 | 6713 | 6755 | 6797 | 6839 | 6881 | 6923 | 6965 | 7007 | 7049 | 7091 | 7133 | 7175 | 7217 | 7259 | 7301 | 7343 | 7385 | 7427 | 7469 | 7511 | 7553 | 7595 | 7637 | 7679 | 7721 | 7763 | 7805 | 7847 | 7889 | 7931 | 7973 | 8015 | 8057 | 8099 | 8141 | 8183 | 8225 | 8267 | 8309 | 8351 | 8393 | 8435 | 8477 | 8519 | 8561 | 8603 | 8645 | 8687 | 8729 | 8771 | 8813 | 8855 | 8897 | 8939 | 8981 | 9023 | 9065 | 9107 | 9149 | 9191 | 9233 | 9275 | 9317 | 9359 | 9401 | 9443 | 9485 | 9527 | 9569 | 9611 | 9653 | 9695 | 9737 | 9779 | 9821 | 9863 | 9905 | 9947 | 9989 | 10031 | 10073 | 10115 | 10157 | 10199 | 10241 | 10283 | 10325 | 10367 | 10409 | 10451 | 10493 | 10535 | 10577 | 10619 | 10661 | 10703 | 10745 | 10787 | 10829 | 10871 | 10913 | 10955 | 10997 | 11039 | 11081 | 11123 | 11165 | 11207 | 11249 | 11291 | 11333 | 11375 | 11417 | 11459 | 11501 | 11543 | 11585 | 11627 | 11669 | 11711 | 11753 | 11795 | 11837 | 11879 | 11921 | 11963 | 12005 | 12047 | 12089 | 12131 | 12173 | 12215 | 12257 | 12299 | 12341 | 12383 | 12425 | 12467 | 12509 | 12551 | 12593 | 12635 | 12677 | 12719 | 12761 | 12803 | 12845 | 12887 | 12929 | 12971 | 13013 | 13055 | 13097 | 13139 | 13181 | 13223 | 13265 | 13307 | 13349 | 13391 | 13433 | 13475 | 13517 | 13559 | 13601 | 13643 | 13685 | 13727 | 13769 | 13811 | 13853 | 13895 | 13937 | 13979 | 14021 | 14063 | 14105 | 14147 | 14189 | 14231 | 14273 | 14315 | 14357 | 14399 | 14441 | 14483 | 14525 | 14567 | 14609 | 14651 | 14693 | 14735 | 14777 | 14819 | 14861 | 14903 | 14945 | 14987 | 15029 | 15071 | 15113 | 15155 | 15197 | 15239 | 15281 | 15323 | 15365 | 15407 | 15449 | 15491 | 15533 | 15575 | 15617 | 15659 | 15701 | 15743 | 15785 | 15827 | 15869 | 15911 | 15953 | 15995 | 16037 | 16079 | 16121 | 16163 | 16205 | 16247 | 16289 | 16331 | 16373 | 16415 | 16457 | 16499 | 16541 | 16583 | 16625 | 16667 | 16709 | 16751 | 16793 | 16835 | 16877 | 16919 | 16961 | 17003 | 17045 | 17087 | 17129 | 17171 | 17213 | 17255 | 17297 | 17339 | 17381 | 17423 | 17465 | 17507 | 17549 | 17591 | 17633 | 17675 | 17717 | 17759 | 17801 | 17843 | 17885 | 17927 | 17969 | 18011 | 18053 | 18095 | 18137 | 18179 | 18221 | 18263 | 18305 | 18347 | 18389 | 18431 | 18473 | 18515 | 18557 | 18599 | 18641 | 18683 | 18725 | 18767 | 18809 | 18851 | 18893 | 18935 | 18977 | 19019 | 19061 | 19103 | 19145 | 19187 | 19229 | 19271 | 19313 | 19355 | 19397 | 19439 | 19481 | 19523 | 19565 | 19607 | 19649 | 19691 | 19733 | 19775 | 19817 | 19859 | 19901 | 19943 | 19985 | 20027 | 20069 | 20111 | 20153 | 20195 | 20237 | 20279 | 20321 | 20363 | 20405 | 20447 | 20489 | 20531 | 20573 | 20615 | 20657 | 20699 | 20741 | 20783 | 20825 | 20867 | 20909 | 20951 | 20993 | 21035 | 21077 | 21119 | 21161 | 21203 | 21245 | 21287 | 21329 | 21371 | 21413 | 21455 | 21497 | 21539 | 21581 | 21623 | 21665 | 21707 | 21749 | 21791 | 21833 | 21875 | 21917 | 21959 | 22001 | 22043 | 22085 | 22127 | 22169 | 22211 | 22253 | 22295 | 22337 | 22379 | 22421 | 22463 | 22505 | 22547 | 22589 | 22631 | 22673 | 22715 | 22757 | 22799 | 22841 | 22883 | 22925 | 22967 | 23009 | 23051 | 23093 | 23135 | 23177 | 23219 | 23261 | 23303 | 23345 | 23387 | 23429 | 23471 | 23513 | 23555 | 23597 | 23639 | 23681 | 23723 | 23765 | 23807 | 23849 | 23891 | 23933 | 23975 | 24017 | 24059 | 24101 | 24143 | 24185 | 24227 | 24269 | 24311 | 24353 | 24395 | 24437 | 24479 | 24521 | 24563 | 24605 | 24647 | 24689 | 24731 | 24773 | 24815 | 24857 | 24899 | 24941 | 24983 | 25025 | 25067 | 25109 | 25151 | 25193 | 25235 | 25277 | 25319 | 25361 | 25403 | 25445 | 25487 | 25529 | 25571 | 25613 | 25655 | 25697 | 25739 | 25781 | 25823 | 25865 | 25907 | 25949 | 25991 | 26033 | 26075 | 26117 | 26159 | 26201 | 26243 | 26285 | 26327 | 26369 | 26411 | 26453 | 26495 | 26537 | 26579 | 26621 | 26663 | 26705 | 26747 | 26789 | 26831 | 26873 | 26915 | 26957 | 27000 | 27042 | 27084 | 27126 | 27168 | 27210 | 27252 | 27294 | 27336 | 27378 | 27420 | 27462 | 27504 | 27546 | 27588 | 27630 | 27672 | 27714 | 27756 | 27798 | 27840 | 27882 | 27924 | 27966 | 28008 | 28050 | 28092 | 28134 | 28176 | 28218 | 28260 | 28302 | 28344 | 28386 | 28428 | 28470 | 28512 | 28554 | 28596 | 28638 | 28680 | 28722 | 28764 | 28806 | 28848 | 28890 | 28932 | 28974 | 29016 | 29058 | 29100 | 29142 | 29184 | 29226 | 29268 | 29310 | 29352 | 29394 | 29436 | 29478 | 29520 | 29562 | 29604 | 29646 | 29688 | 29730 | 29772 | 29814 | 29856 | 29898 | 29940 | 29982 | 30024 | 30066 | 30108 | 30150 | 30192 | 30234 | 30276 | 30318 | 30360 | 30402 | 30444 | 30486 | 30528 | 30570 | 30612 | 30654 | 30696 | 30738 | 30780 | 30822 | 30864 | 30906 | 30948 | 30990 | 31032 | 31074 | 31116 | 31158 | 31200 | 31242 | 31284 | 31326 | 31368 | 31410 | 31452 | 31494 | 31536 | 31578 | 31620 | 31662 | 31704 | 31746 | 31788 | 31830 | 31872 | 31914 | 31956 | 32000 | 32042 | 32084 | 32126 | 32168 | 32210 | 32252 | 32294 | 32336 | 32378 | 32420 | 32462 | 32504 | 32546 | 32588 | 32630 | 32672 | 32714 | 32756 | 32798 | 32840 | 32882 | 32924 | 32966 | 33008 | 33050 | 33092 | 33134 | 33176 | 33218 | 33260 | 33302 | 33344 | 33386 | 33428 | 33470 | 33512 | 33554 | 33596 | 33638 | 33680 | 33722 | 33764 | 33806 | 33848 | 33890 | 33932 | 33974 | 34016 | 34058 | 34100 | 34142 | 34184 | 34226 | 34268 | 34310 | 34352 | 34394 | 34436 | 34478 | 34520 | 34562 | 34604 | 34646 | 34688 | 34730 | 34772 | 34814 | 34856 | 34898 | 34940 | 34982 | 35024 | 35066 | 35108 | 35150 | 35192 | 35234 | 35276 | 35318 | 35360 | 35402 | 35444 | 35486 | 35528 | 35570 | 35612 | 35654 | 35696 | 35738 | 35780 | 35822 | 35864 | 35906 | 35948 | 35990 | 36032 | 36074 | 36116 | 36158 | 36200 | 36242 | 36284 | 36326 | 36368 | 36410 | 36452 | 36494 | 36536 | 36578 | 36620 | 36662 | 36704 | 36746 | 36788 | 36830 | 36872 | 36914 | 36956 | 36998 | 37040 | 37082 | 37124 | 37166 | 37208 | 37250 | 37292 | 37334 | 37376 | 37418 | 37460 | 37502 | 37544 | 37586 | 37628 | 37670 | 37712 | 37754 | 37796 | 37838 | 37880 | 37922 | 37964 | 38006 | 38048 | 38090 | 38132 | 38174 | 38216 | 38258 | 38300 | 38342 | 38384 | 38426 | 38468 | 38510 | 38552 | 38594 | 38636 | 38678 | 38720 | 38762 | 38804 | 38846 | 38888 | 38930 | 38972 | 39014 | 39056 | 39098 | 39140 | 39182 | 39224 | 39266 | 39308 | 39350 | 39392 | 39434 | 39476 | 39518 | 39560 | 39602 | 39644 | 39686 | 39728 | 39770 | 39812 | 39854 | 39896 | 39938 | 39980 | 40022 | 40064 | 40106 | 40148 | 40190 | 40232 | 40274 | 40316 | 40358 | 40400 | 40442 | 40484 | 40526 | 40568 | 40610 | 40652 | 40694 | 40736 | 40778 | 40820 | 40862 | 40904 | 40946 | 40988 | 41030 | 41072 | 41114 | 41156 | 41198 | 41240 | 41282 | 41324 | 41366 | 41408 | 41450 | 41492 | 41534 | 41576 | 41618 | 41660 | 41702 | 41744 | 41786 | 41828 | 41870 | 41912 | 41954 | 41996 | 42038 | 42080 | 42122 | 42164 | 42206 | 42248 | 42290 | 42332 | 42374 | 42416 | 42458 | 42500 | 42542 | 42584 | 42626 | 42668 | 42710 | 42752 | 42794 | 42836 | 42878 | 42920 | 42962 | 43004 | 43046 | 43088 | 43130 | 43172 | 43214 | 43256 | 43298 | 43340 | 43382 | 43424 | 43466 | 43508 | 43550 | 43592 | 43634 | 43676 | 43718 | 43760 | 43802 | 43844 | 43886 | 43928 | 43970 | 44012 | 44054 | 44096 | 44138 | 44180 | 44222 | 44264 | 44306 | 44348 | 44390 | 44432 | 44474 | 44516 | 44558 | 44600 | 44642 | 44684 | 44726 | 44768 | 44810 | 44852 | 44894 | 44936 | 44978 | 45020 | 45062 | 45104 | 45146 | 45188 | 45230 | 45272 | 45314 | 45356 | 45398 | 45440 | 45482 | 45524 | 45566 | 45608 | 45650 | 45692 | 45734 | 45776 | 45818 | 45860 | 45902 | 45944 | 45986 | 46028 | 46070 | 46112 | 46154 | 46196 | 46238 | 46280 | 46322 | 46364 | 46406 | 46448 | 46490 | 46532 | 46574 | 46616 | 46658 | 46700 | 46742 | 46784 | 46826 | 46868 | 46910 | 46952 | 46994 | 47036 | 47078 | 47120 | 47162 | 47204 | 47246 | 47288 | 47330 | 47372 | 47414 | 47456 | 47498 | 47540 | 47582 | 47624 | 47666 | 47708 | 47750 | 47792 | 47834 | 47876 | 47918 | 47960 | 48002 | 48044 | 48086 | 48128 | 48170 | 48212 | 48254 | 48296 | 48338 | 48380 | 48422 | 48464 | 48506 | 48548 | 48590 | 48632 | 48674 | 48716 | 48758 | 48800 | 48842 | 48884 | 48926 | 48968 | 49010 | 49052 | 49094 | 49136 | 49178 | 49220 | 49262 | 49304 | 49346 | 49388 | 49430 | 49472 | 49514 | 49556 | 49598 | 49640 | 49682 | 49724 | 49766 | 49808 | 49850 | 49892 | 49934 | 49976 | 50018 | 50060 | 50102 | 50144 | 50186 | 50228 | 50270 | 50312 | 50354 | 50396 | 50438 | 50480 | 50522 | 50564 | 50606 | 50648 | 50690 | 50732 | 50774 |

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|  | 0529        | 0571 | 0613 | 0665 | 0707 | 0749 | 0791 | 0833 | 0875 | 0917 | 0959 | 1001 | 1043 | 1085 | 1127 | 1169 | 1211 | 1253 | 1295 | 1337 | 1379 | 1421 | 1463 | 1505 |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0116      |                      |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 0217      |                      |
|  | 6           | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 0318      |                      |
|  | 1           | 1    | 2    | 2    | 3    | 3    | 4    | 4    | 5    | 5    | 7    | 7    | 8    | 8    | 9    | 9    | 0    | 0    | 1    | 1    | 1    | 3    | 3    | 4    | 0419      |                      |

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Medulla<br>Hyperplasia        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Islets, Pancreatic<br>Hyperplasia     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Parathyroid Gland<br>Hyperplasia      | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Pituitary Gland<br>Angiectasis        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Pigmentation                          | 2 |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |  |
| Pars Distalis, Cyst                   |   |   |   | X |   |   |   |   |   | X | X |   |   |   |   |   |   |   | X |   |   | X |   |   |  |
| Pars Distalis, Hyperplasia            |   | 3 | 4 | 4 |   | 4 |   | 1 | 2 | 3 | 3 | 4 | 4 | 4 | 2 | 1 | 4 |   | 3 | 3 | 2 | 3 | 4 | 3 |  |
| Thyroid Gland<br>Ultimobranchial Cyst | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + |   |  |
| C-cell, Hyperplasia                   | 2 |   | 1 |   | 2 |   | 1 | 2 |   | 1 |   | 1 | 4 |   |   |   |   |   |   |   |   | 1 | 1 |   |  |
| Follicular Cell, Hyperplasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 3 |   |  |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                  |  |  |  |  |  |   |   |  |  |  |  |  |  |  |  |   |   |   |  |
|----------------------------------|--|--|--|--|--|---|---|--|--|--|--|--|--|--|--|---|---|---|--|
| Clitoral Gland<br>Hyperkeratosis |  |  |  |  |  | + |   |  |  |  |  |  |  |  |  | + | + | + |  |
| Inflammation, Suppurative        |  |  |  |  |  |   | 4 |  |  |  |  |  |  |  |  | 4 | 3 | 4 |  |
| Duct, Dilatation                 |  |  |  |  |  |   | 4 |  |  |  |  |  |  |  |  | 4 | 4 | 4 |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|  | 0529        | 0571 | 0613 | 0645 | 0707 | 0749 | 0771 | 0859 | 0906 | 0928 | 0958 | 1008 | 1028 | 1048 | 1078 | 1108 | 1138 | 1168 | 1208 | 1238 | 1268 | 1308 | 1338 | 1368 |                      |
| ANIMAL ID  | 0111        | 0112 | 0113 | 0114 | 0115 | 0116 | 0117 | 0118 | 0119 | 0120 | 0121 | 0122 | 0123 | 0124 | 0125 | 0126 | 0127 | 0128 | 0129 | 0130 | 0131 | 0132 | 0133 | 0134 |                      |
| Ovary  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |
| Atrophy  | 3           | 2    | 2    | 2    | 2    | 4    | 2    | 3    | 2    | 3    | 2    | 2    | 3    | 2    | 2    | 2    | 3    |      | 4    | 2    | 2    | 2    | 2    | 1    | 2                    |
| Cyst   |             |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Hyperplasia, Sertoliform                                 |             |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      | 2    |      |      |      | 2    |                      |
| Bilateral, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |                      |
| Bilateral, Follicle, Cyst                                |             |      |      |      |      |      |      |      |      |      | X    |      | X    |      |      |      |      |      |      |      |      |      |      |      |                      |
| Follicle, Cyst   |             |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |                      |
| Granulosa Cell, Hyperplasia                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Oviduct  | +           | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |
| Uterus   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |
| Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Dilatation   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Hemorrhage   |             |      |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Inflammation, Suppurative                                |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Metaplasia, Squamous                                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Degeneration                                |             |      |      |      |      |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |                      |
| Endometrium, Hyperplasia                                 |             |      | 1    |      | 1    |      | 2    | 1    |      | 2    |      | 4    | 2    |      |      | 2    |      |      |      |      |      | 1    |      | 2    |                      |
| Endometrium, Hyperplasia, Cystic                         | 1           | 2    |      | 2    |      | 2    |      |      |      | 2    |      |      |      |      | 2    |      |      |      |      | 2    | 2    | 2    |      | 2    | 2                    |
| Lumen, Dilatation  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Stroma, Fibrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Vagina   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    |
| Atrophy  |             |      |      |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
| Infiltration Cellular, Polymorphonuclear                 |             |      | 2    |      |      |      |      |      |      |      |      |      | 2    |      |      | 3    |      |      |      | 4    |      |      |      |      |                      |
| Epithelium, Degeneration                                 |             |      | 2    |      |      |      |      |      |      |      |      |      | 2    | 4    |      | 3    |      |      |      |      |      |      |      |      |                      |
| Epithelium, Hyperplasia                                  |             |      |      |      |      |      | 4    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID        | females<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|------------------|------------------|------------------|
|  | 0<br>5<br>2<br>9 | 0<br>5<br>7<br>1 | 0<br>6<br>1<br>3 | 0<br>6<br>4<br>5 | 0<br>7<br>0<br>6 | 0<br>4<br>4<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>0<br>9 | 0<br>5<br>6<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>1 | 0<br>6<br>2<br>5 | 0<br>7<br>2<br>5 | 0<br>6<br>6<br>8 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>8 | 0<br>3<br>4<br>0 | 0<br>7<br>2<br>8 | 0<br>6<br>0<br>9 |                  |                      | 0<br>6<br>0<br>4 | 0<br>5<br>6<br>3 | 0<br>6<br>2<br>9 | 0<br>4<br>6<br>2 |
|  | 0<br>1<br>6<br>1 | 0<br>1<br>6<br>2 | 0<br>1<br>6<br>1 | 0<br>1<br>6<br>2 | 0<br>1<br>6<br>3 | 0<br>1<br>6<br>4 | 0<br>1<br>6<br>2 | 0<br>1<br>6<br>4 | 0<br>1<br>6<br>5 | 0<br>1<br>6<br>7 | 0<br>3<br>7<br>7 | 0<br>3<br>7<br>8 | 0<br>3<br>7<br>8 | 0<br>3<br>7<br>9 | 0<br>3<br>8<br>0 | 0<br>3<br>8<br>1 | 0<br>3<br>8<br>2 | 0<br>3<br>8<br>3 | 0<br>3<br>8<br>4 | 0<br>5<br>9<br>1 | 0<br>5<br>9<br>3 | 0<br>5<br>9<br>4     | 0<br>5<br>9<br>1 | 0<br>5<br>9<br>2 | 0<br>5<br>9<br>4 | 0<br>5<br>9<br>5 |
| Epithelium, Mucification                                 | 4                | 2                |                  | 2                | 4                |                  | 2                | 4                |                  | 2                | 3                | 3                |                  | 4                | 3                |                  | 3                | 2                | 4                | 2                | 4                | 4                    | 4                | 4                | 3                |                  |

**HEMATOPOIETIC SYSTEM**

|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Bone Marrow                                | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hypocellularity                            |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Myeloid Cell, Hyperplasia                  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node                                 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iliac, Degeneration, Cystic                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iliac, Hyperplasia, Lymphoid               |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iliac, Infiltration Cellular, Plasma Cell  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Degeneration, Cystic               | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lumbar, Infiltration Cellular, Plasma Cell | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Hyperplasia, Lymphoid               |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Renal, Infiltration Cellular, Plasma Cell  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymph Node, Mandibular                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Lymphoid                      | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Plasma Cell         | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spleen                                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hematopoietic Cell Proliferation           | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pigmentation                               | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Thymus                                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                    | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**INTEGUMENTARY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|------------------|
|  | 0<br>5<br>2<br>9 | 0<br>5<br>7<br>1 | 0<br>6<br>1<br>3 | 0<br>6<br>4<br>5 | 0<br>7<br>0<br>6 | 0<br>4<br>4<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>0<br>9 | 0<br>5<br>6<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>1 | 0<br>6<br>2<br>5 | 0<br>7<br>2<br>5 | 0<br>6<br>6<br>8 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>8 | 0<br>3<br>4<br>0 | 0<br>7<br>0<br>8 | 0<br>6<br>0<br>4 |           |                      | 0<br>6<br>6<br>3 | 0<br>5<br>2<br>9 | 0<br>6<br>6<br>2 | 0<br>4<br>4<br>5 |
|  | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>5           | 0<br>5    | 0<br>5               | 0<br>5           | 0<br>5           | 0<br>5           | 0<br>5           |
|  | 6<br>1           | 6<br>1           | 6<br>2           | 6<br>2           | 6<br>3           | 6<br>4           | 6<br>4           | 6<br>5           | 6<br>5           | 6<br>7           | 6<br>7           | 6<br>7           | 6<br>8           | 6<br>8           | 6<br>9           | 6<br>9           | 6<br>0           | 6<br>1           | 6<br>2           | 6<br>1           | 6<br>1    | 6<br>3               | 6<br>3           | 6<br>4           | 6<br>4           | 6<br>5           |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus                     |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| Hyperplasia, Lobular               | 4 | 3 | 2 |   | 2 |   | 4 | 3 |   | 2 | 4 | 1 | 1 | 4 |   | 2 | 2 |   | 3 | 3 | 2 |   | 3 | 3 | 2 |
| Alveolus, Dilatation               |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 3 |   |   |   |   |   |   |
| Duct, Dilatation                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 3 |   |   |   |   |   |   |
| Skin                               |   |   |   |   | + |   | + |   |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   | + |   |
| Epithelium, Foot, Hyperplasia      |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |
| Foot, Edema                        |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 | 3 |   |   |   |   |   |   |   |
| Foot, Fibrosis                     |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 3 | 4 |   |   |   |   |   |   |   |
| Foot, Inflammation, Chronic Active |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |
| Foot, Necrosis                     |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foot, Ulcer                        |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   |   |   |   |

MUSCULOSKELETAL SYSTEM

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

|                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Compression           | 3 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Brain, Cerebellum     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Ventricle, Dilatation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

RESPIRATORY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|------------------|------------------|
|  | 0<br>5<br>2<br>9 | 0<br>5<br>7<br>1 | 0<br>6<br>1<br>3 | 0<br>6<br>4<br>5 | 0<br>7<br>0<br>6 | 0<br>4<br>4<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>0<br>9 | 0<br>5<br>6<br>9 | 0<br>7<br>2<br>8 | 0<br>7<br>2<br>8 | 0<br>5<br>4<br>1 | 0<br>6<br>2<br>5 | 0<br>7<br>2<br>5 | 0<br>6<br>6<br>8 | 0<br>6<br>0<br>1 | 0<br>7<br>2<br>8 | 0<br>3<br>4<br>0 | 0<br>7<br>2<br>8 | 0<br>6<br>0<br>9 |           |                      | 0<br>6<br>0<br>4 | 0<br>5<br>6<br>3 | 0<br>6<br>2<br>9 |
|  | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>1           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>3           | 0<br>5           | 0<br>5    | 0<br>5               | 0<br>5           | 0<br>5           | 0<br>5           |
|  | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 6                | 7                | 7                | 7                | 7                | 7                | 7                | 7                | 8                | 8                | 8                | 8                | 9         | 9                    | 9                | 9                | 9                |
|  | 1                | 1                | 2                | 2                | 3                | 3                | 4                | 4                | 5                | 5                | 7                | 7                | 8                | 8                | 9                | 9                | 0                | 0                | 1                | 1                | 3         | 3                    | 4                | 4                | 5                |
|  | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1                | 2                | 1         | 2                    | 1                | 2                | 1                |

|  |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|--|--|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung   | + | + | + | + | + | + | + | + | + |   |  |  |  | + | + | + | + | + |   |   |   |   |   |   |   |
| Foreign Body   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte                      |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Lymphocyte                      |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous                            |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar Epithelium, Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose   | + | + | + | + | + | + |   |   | + | + |  |  |  | + | + |   |   |   | + |   | + | + | + | + | + |
| Foreign Body   |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative                              |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    | 4 |   |   |   |   | 2 |   |   |   |   |  |  |  | 2 |   |   |   |   |   |   |   |   |   | 3 |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |   |   |   |   |   |   |   |   |   |   |  |  |  | 2 |   |   |   |   |   |   |   |   |   |   | 2 |
| Transitional Epithelium, Accumulation, Hyaline Droplet | 3 |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Upper Molar, Inflammation, Chronic Active              |   |   |   |   |   |   |   |   |   |   |  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |
| Trachea  | + | + | + | + | + | + |   |   | + | A |  |  |  | + | + |   |   | + | + | + | + | + | + | + |   |

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney         | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Casts Protein  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Infarct        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization | 4 | 1 |   |   |   | 2 |   | 1 | 2 |   |   |   |   | 1 | 1 |   |   | 1 |   |   |   |   | 1 | 2 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |    |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|----|
|  | 07          | 05    | 06    | 04    | 04    | 04    | 05    | 07    | 05    | 06    | 05    | 05    | 06    | 07    | 07    | 05    | 07    | 06    | 06    | 07    |          | 05    | 05    | 07 |
| ANIMAL ID  | 05952       | 05996 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999    | 05999 | 05999 |    |
|  | 7           | 5     | 6     | 4     | 4     | 4     | 5     | 7     | 5     | 6     | 5     | 5     | 6     | 7     | 7     | 5     | 7     | 6     | 6     | 7     | 5        | 5     | 7     |    |
|  | 2           | 7     | 5     | 4     | 8     | 8     | 8     | 2     | 8     | 2     | 4     | 1     | 6     | 2     | 2     | 4     | 2     | 5     | 2     | 2     | 7        | 0     | 2     |    |
|  | 7           | 4     | 2     | 3     | 4     | 9     | 2     | 6     | 8     | 9     | 0     | 1     | 0     | 8     | 7     | 1     | 8     | 2     | 4     | 7     | 4        | 6     | 8     |    |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0        | 0     | 0     |    |
|  | 5           | 5     | 5     | 5     | 5     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 7     | 9     | 9     | 9     | 9     | 9     | 9        | 9     | 9     |    |
|  | 9           | 9     | 9     | 9     | 9     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 6     | 6     | 6     | 6     | 7     | 7        | 7     | 7     |    |
|  | 5           | 6     | 6     | 7     | 7     | 4     | 4     | 5     | 5     | 6     | 6     | 7     | 7     | 8     | 8     | 8     | 9     | 9     | 0     | 0     | 1        | 1     | 1     |    |
|  | 2           | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2        | 1     | 2     |    |

ALIMENTARY SYSTEM

|   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Esophagus                               |  | + | + | + | + | + | + |   | + | + | + | + | + |   | + | + | + |   | + | + |   |   | 35     |
| Intestine Large, Colon                  |  | + | + | + | + | A | + |   | + | + | + | + | + |   | + | + | + |   | + | + |   |   | 33     |
| Intestine Small, Ileum                  |  | A | + | + | + | A | + |   | + | + | + | + | + |   | + | + | + |   | + | + |   |   | 31     |
| Liver                                   |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48     |
| Angiectasis                             |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Basophilic Focus                        |  |   | X |   | X |   | X | X | X |   | X |   |   |   | X | X |   | X | X |   | X | X | 25     |
| Clear Cell Focus                        |  |   |   |   |   |   | X | X | X |   |   |   |   |   |   | X |   | X |   |   |   |   | 9      |
| Degeneration, Cystic                    |  |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1 | 1 |   |   |   |   | 6 1.0  |
| Fatty Change                            |  |   | 3 |   | 4 |   | 3 | 1 |   | 1 | 3 |   | 3 |   | 2 |   | 3 |   |   |   |   |   | 17 2.5 |
| Hematopoietic Cell Proliferation        |  |   |   |   | 1 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 3 1.3  |
| Hemorrhage                              |  |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 3.0  |
| Hepatodiaphragmatic Nodule              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1      |
| Infiltration Cellular, Mononuclear Cell |  | 1 | 1 | 1 | 1 |   | 1 |   | 1 | 1 | 2 |   | 1 | 1 | 1 |   | 1 | 2 | 1 | 2 |   | 1 | 33 1.2 |
| Inflammation, Chronic Active            |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Mixed Cell Focus                        |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |
| Tension Lipidosis                       |  |   | 3 |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 5 2.8  |
| Vacuolization Cytoplasmic               |  |   | 2 |   |   |   | 2 |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 15 1.6 |
| Bile Duct, Hyperplasia                  |  |   |   |   | 1 |   | 1 |   |   |   | 2 |   |   |   | 2 |   | 3 | 1 | 3 |   | 2 |   | 18 1.8 |
| Biliary Tract, Fibrosis                 |  |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   | 1 |   | 2 |   |   |   | 8 1.3  |
| Hepatocyte, Necrosis                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Mesentery                               |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1      |
| Oral Mucosa                             |  |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | 1      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F          | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|   | 07          | 05    | 06    | 04    | 04    | 04    | 05    | 07    | 05    | 06    | 05    | 05    | 06    | 07    | 07    | 05    | 07    | 06    | 06    | 07    |          | 05    | 05    |
| ANIMAL ID   | 05952       | 05996 | 05996 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999    | 05999 | 05999 |
| Pancreas  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     |
| Infiltration Cellular, Lymphocyte<br>Inflammation, Chronic Active | 1           |       | 1     | 1     | 1     |       |       | 1     |       |       | 1     | 1     | 2     |       | 3     | 1     | 1     |       | 2     | 2     |          | 1     |       |
| Lipomatosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |          |       |       |
| Pigmentation<br>Acinus, Degeneration                              |             |       |       |       | 1     | 2     | 1     |       | 3     | 1     |       | 1     | 1     | 2     | 1     | 4     | 1     |       | 1     | 2     | 2        | 1     |       |
|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Stomach, Forestomach  |             | +     | +     | +     | +     | +     | +     |       |       | +     | +     | +     | +     | +     |       |       | +     |       | +     | +     |          | +     | +     |
| Stomach, Glandular  |             | +     | +     | +     | +     | A     | +     |       |       | +     | +     | +     | +     | +     |       |       | +     |       | +     | +     |          | +     | +     |
| <b>CARDIOVASCULAR SYSTEM</b>                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Blood Vessel  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     |
| Heart   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     |
| Cardiomyopathy  | 3           | 1     | 1     | 1     |       | 1     |       | 1     | 1     |       | 1     | 1     | 1     |       | 1     |       | 2     | 1     |       | 1     | 1        |       | 2     |
| Polyarteritis   |             |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| <b>ENDOCRINE SYSTEM</b>   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Adrenal Cortex  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     |
| Angiectasis   |             |       | 2     |       |       |       |       |       |       |       |       |       | 2     | 2     |       |       |       |       | 2     |       |          | 2     |       |
| Degeneration, Cystic  | 3           | 2     | 4     | 2     | 2     |       | 3     | 4     |       | 2     |       | 4     | 4     |       |       |       | 4     | 3     | 2     | 2     |          | 3     | 2     |
| Hemorrhage  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Hyperplasia   |             |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Hypertrophy   |             |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Pigmentation  |             |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |
| Vacuolization Cytoplasmic   |             |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |          |       |       |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|
|  | 077         | 075   | 066   | 044   | 044   | 044   | 055   | 077   | 055   | 066   | 055   | 066   | 077   | 077   | 055   | 077   | 066   | 066   | 077   | 055   |          | 055 |
| ANIMAL ID  | 05952       | 05991 | 05996 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999    |     |
| Adrenal Medulla Hyperplasia                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 48  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3   |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 48  |
| Islets, Pancreatic Hyperplasia                           | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 48  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1   |
| Parathyroid Gland Hyperplasia                            | +           | +     | +     | +     | +     | +     | +     | +     | +     | 2     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 47  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 8   |
| Pituitary Gland Angiectasis                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 48  |
| Pigmentation   | 4           |       |       |       |       |       | 3     |       |       |       |       |       | 4     |       |       |       | 4     |       |       |       |          | 8   |
| Pars Distalis, Cyst                                      |             |       |       | X     |       | X     |       |       |       |       | X     | X     |       |       |       | X     |       |       |       |       |          | 10  |
| Pars Distalis, Hyperplasia                               |             |       |       | 3     |       | 3     | 2     | 2     | 4     | 3     | 3     | 3     |       | 4     |       | 3     |       | 2     |       | 4     | 3        | 34  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 3.1 |
| Thyroid Gland Ultimobranchial Cyst                       | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 45  |
| C-cell, Hyperplasia                                      |             |       |       |       |       |       |       | 1     |       |       |       | 1     |       |       |       |       | 2     |       |       | 1     | 2        | 2   |
| Follicular Cell, Hyperplasia                             | 2           |       | 2     |       |       |       |       |       |       |       | 2     |       |       | 3     |       | 2     |       |       |       |       |          | 17  |
|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 7   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Clitoral Gland Hyperkeratosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| Inflammation, Suppurative     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| Duct, Dilatation              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|------|
|  | 0727        | 0754  | 0765  | 0744  | 0744  | 0744  | 0755  | 0777  | 0755  | 0766  | 0755  | 0766  | 0777  | 0777  | 0755  | 0777  | 0766  | 0766  | 0777  | 0755  |          | 0755  | 0777 |
| ANIMAL ID  | 05952       | 05996 | 05996 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999 | 05999    | 05999 |      |
| Ovary  | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |      |
| Atrophy  | 3           | 3     | 2     | 4     | 2     |       | 2     | 3     | 2     | 2     | 3     | 3     | 2     | 4     | 2     | 2     | 2     | 4     | 2     | 3     | 2        | 2     | 4    |
| Cyst   |             |       |       |       |       |       | X     | X     |       |       |       |       |       |       |       |       |       | X     | X     |       |          |       |      |
| Hyperplasia, Sertoliform                                 |             |       |       |       |       |       |       |       | 1     |       |       |       |       |       | 1     |       |       |       |       |       |          |       |      |
| Bilateral, Cyst  |             |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |          |       |      |
| Bilateral, Follicle, Cyst                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Follicle, Cyst   | X           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Granulosa Cell, Hyperplasia                              |             |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |          |       |      |
| Oviduct  | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |      |
| Uterus   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |      |
| Atrophy  |             | 3     |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       | 3     |       |          |       |      |
| Dilatation   |             |       | 3     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Inflammation, Suppurative                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Metaplasia, Squamous                                     |             |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       | 1     |       |       |          |       |      |
| Endometrium, Cyst  |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Endometrium, Degeneration                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Endometrium, Hyperplasia                                 | 1           |       |       |       | 2     |       |       |       |       |       | 2     |       |       |       |       | 1     | 1     |       |       | 2     | 2        |       |      |
| Endometrium, Hyperplasia, Cystic                         |             |       | 3     |       |       |       | 3     | 3     | 3     | 2     |       | 2     | 3     | 2     |       |       |       | 4     |       | 2     |          | 2     |      |
| Lumen, Dilatation  |             |       |       | 4     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |      |
| Stroma, Fibrosis   |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |          |       |      |
| Vagina   | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     |      |
| Atrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |          |       |      |
| Infiltration Cellular, Polymorphonuclear                 | 4           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |      |
| Epithelium, Degeneration                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |      |
| Epithelium, Hyperplasia                                  |             |       |       | 2     |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |       |          |       |      |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   | 0 |
| ANIMAL ID  | 7               | 5 | 6 | 4 | 4 | 4 | 5 | 7 | 5 | 6 | 5 | 5 | 6 | 7 | 7 | 5 | 7 | 6 | 6 | 7 | 5 | 5 | 7 |
|  | 2               | 7 | 5 | 4 | 8 | 8 | 8 | 2 | 8 | 2 | 4 | 1 | 6 | 2 | 2 | 4 | 2 | 5 | 2 | 2 | 7 | 0 | 2 |
|  | 7               | 4 | 2 | 3 | 4 | 9 | 2 | 6 | 8 | 9 | 0 | 1 | 0 | 8 | 7 | 1 | 8 | 2 | 4 | 7 | 4 | 6 | 8 |
|  | 0               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 5               | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
|  | 9               | 9 | 9 | 9 | 9 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
|  | 5               | 6 | 6 | 7 | 7 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 |
|  | 2               | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|  | <b>* TOTALS</b> |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Mucification                                 | 4               | 4 | 4 |   | 4 |   | 3 | 3 | 3 | 4 | 2 | 4 | 4 | 2 | 4 | 4 | 2 | 4 |   | 4 | 4 | 3 |   |
|  | <b>37 3.3</b>   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           |            |            |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|------------|------------|
| Bone Marrow                                | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>47</b> |           |            |            |
| Hypocellularity                            |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>3.0</b> |
| Myeloid Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>4.0</b> |
| Lymph Node                                 |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3</b>  |            |            |
| Iliac, Degeneration, Cystic                |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>4.0</b> |
| Iliac, Hyperplasia, Lymphoid               |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>3.0</b> |
| Iliac, Infiltration Cellular, Plasma Cell  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>4.0</b> |
| Lumbar, Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>2</b>   | <b>4.0</b> |
| Lumbar, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>4.0</b> |
| Renal, Hyperplasia, Lymphoid               |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>2.0</b> |
| Renal, Infiltration Cellular, Plasma Cell  |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>1</b>   | <b>4.0</b> |
| Lymph Node, Mandibular                     |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>3</b>  |            |            |
| Hyperplasia, Lymphoid                      |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>2</b>   | <b>3.5</b> |
| Infiltration Cellular, Plasma Cell         |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |           | <b>3</b>   | <b>4.0</b> |
| Spleen                                     | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>47</b> |           |            |            |
| Hematopoietic Cell Proliferation           | 1 |   | 2 | 2 | 4 |   | 2 | 1 |   | 2 | 4 |   | 1 |   | 3 |   | 1 | 2 | 2 | 3 |   |   |           | <b>29</b> | <b>2.3</b> |            |
| Pigmentation                               |   | 4 | 2 |   | 2 |   | 2 | 1 | 2 |   | 4 | 1 | 2 | 3 | 2 | 2 | 2 | 1 | 2 |   | 1 | 4 |           | <b>38</b> | <b>2.2</b> |            |
| Thymus                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>48</b> |           |            |            |
| Atrophy                                    | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |           | <b>47</b> | <b>3.9</b> |            |
| Cyst                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b>  |            |            |

**INTEGUMENTARY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|
|  | 07          | 05 | 06 | 04 | 04 | 04 | 05 | 07 | 05 | 06 | 05 | 05 | 06 | 07 | 07 | 05 | 07 | 06 | 06 | 07 |          | 05 | 05 |
| ANIMAL ID  | 09          | 05 | 05 | 09 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 09 | 09 | 09 | 09 | 09 | 09       | 09 | 09 |
|  | 27          | 44 | 22 | 34 | 48 | 89 | 22 | 66 | 88 | 90 | 11 | 00 | 88 | 77 | 11 | 88 | 22 | 44 | 22 | 44 | 77       | 55 | 77 |

|                                    |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|------------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Mammary Gland                      | +                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |       |
| Atypical Focus                     | 2                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 6 1.8 |
| Hyperplasia, Lobular               | 4 4 4 3 2 3 4 2 4 3 1 2 2 4 2 2 4 3 2 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 39 | 2.8   |
| Alveolus, Dilatation               | 2                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 2.5   |
| Duct, Dilatation                   | 3 1 2 2 2 2 4                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9  | 2.2   |
| Skin                               | +                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8  |       |
| Epithelium, Foot, Hyperplasia      | 4 4                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 5 4.0 |
| Foot, Edema                        | 4 4                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 5 3.8 |
| Foot, Fibrosis                     | 4                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 4 3.8 |
| Foot, Inflammation, Chronic Active | 4 4                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 5 4.0 |
| Foot, Necrosis                     | 4 3                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 3 3.7 |
| Foot, Ulcer                        | 4 4                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 5 4.0 |

MUSCULOSKELETAL SYSTEM

|             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |  |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--|
| Bone, Femur | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |  |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--|

NERVOUS SYSTEM

|                       |                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |
|-----------------------|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|
| Brain, Brain Stem     | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |     |
| Compression           | 1 4 1 4 2 1 3 2 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11 | 2.3 |
| Brain, Cerebellum     | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |     |
| Brain, Cerebrum       | +                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 48 |     |
| Ventricle, Dilatation | 2 2 1             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3  | 1.7 |

RESPIRATORY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue  
X .. Lesion present A .. Autolysis precludes evaluation  
I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25.0 StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-----|
|  | 077         | 075   | 076   | 074   | 074   | 074   | 075   | 077   | 075   | 076   | 075   | 075   | 076   | 077   | 077   | 075   | 077   | 076   | 076   | 077   |          | 075   | 075   | 077 |
| ANIMAL ID  | 05952       | 05561 | 05562 | 05561 | 05567 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577 | 05577    | 05577 | 05577 |     |
|  | 077         | 075   | 076   | 074   | 074   | 074   | 075   | 077   | 075   | 076   | 075   | 075   | 076   | 077   | 077   | 075   | 077   | 076   | 076   | 077   | 075      | 075   | 077   |     |
|  | 27          | 47    | 54    | 43    | 84    | 88    | 82    | 66    | 88    | 92    | 40    | 10    | 62    | 87    | 24    | 18    | 22    | 42    | 55    | 24    | 27       | 74    | 06    |     |
|  | 7           | 4     | 2     | 3     | 4     | 9     | 2     | 6     | 8     | 9     | 0     | 1     | 0     | 8     | 7     | 1     | 8     | 2     | 4     | 2     | 4        | 6     | 8     |     |

|                                   |  |  |  |  |   |   |  |   |  |  |  |  |   |   |  |  |   |   |  |  |  |  |  |        |
|-----------------------------------|--|--|--|--|---|---|--|---|--|--|--|--|---|---|--|--|---|---|--|--|--|--|--|--------|
| Lung                              |  |  |  |  | A |   |  |   |  |  |  |  |   |   |  |  |   |   |  |  |  |  |  | 39     |
| Foreign Body                      |  |  |  |  |   |   |  |   |  |  |  |  |   |   |  |  |   |   |  |  |  |  |  | 1      |
| Infiltration Cellular, Histiocyte |  |  |  |  |   | 1 |  | 1 |  |  |  |  |   | 2 |  |  | 1 | 2 |  |  |  |  |  | 11 1.2 |
| Infiltration Cellular, Lymphocyte |  |  |  |  |   |   |  |   |  |  |  |  | 1 |   |  |  |   |   |  |  |  |  |  | 1 1.0  |
| Inflammation, Granulomatous       |  |  |  |  |   |   |  |   |  |  |  |  |   |   |  |  |   |   |  |  |  |  |  | 1 3.0  |
| Alveolar Epithelium, Hyperplasia  |  |  |  |  |   |   |  |   |  |  |  |  |   |   |  |  |   |   |  |  |  |  |  | 1 1.0  |

|  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  |       |
|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|---|--|-------|
| Nose   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  | 35    |
| Foreign Body   |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  | X |  | 1     |
| Inflammation, Suppurative                              |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  | 2 |  | 1 2.0 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |   |  | 6 2.5 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |   |  | 3 1.7 |
| Transitional Epithelium, Accumulation, Hyaline Droplet |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |   |  | 1 3.0 |
| Upper Molar, Inflammation, Chronic Active              |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  | 3 |  | 1 3.0 |

|         |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|---------|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| Trachea |  |  |  |  | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 33 |
|---------|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

|                |  |   |  |   |   |  |   |  |   |   |  |  |  |   |   |   |   |   |   |   |   |  |   |        |
|----------------|--|---|--|---|---|--|---|--|---|---|--|--|--|---|---|---|---|---|---|---|---|--|---|--------|
| Kidney         |  |   |  |   |   |  |   |  |   |   |  |  |  |   |   |   |   |   |   |   |   |  |   | 47     |
| Casts Protein  |  | 1 |  |   |   |  |   |  |   |   |  |  |  |   |   |   |   | 1 | 1 |   |   |  |   | 5 1.0  |
| Infarct        |  |   |  |   |   |  |   |  |   |   |  |  |  |   |   |   |   |   |   |   |   |  |   | 1      |
| Mineralization |  |   |  | 1 | 1 |  | 1 |  | 2 | 1 |  |  |  | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |  | 1 | 28 1.4 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0630 | 0638 | 0542 | 0727 | 0622 | 0568 | 0665 | 0449 | 0448 | 0551 | 0558 | 0729 | 0676 | 0722 | 0499 | 0647 | 0465 | 0720 | 0758 | 0556 | 0752 | 0678 | 0603 | females<br>(cont...) |
|  | ANIMAL ID   | 0171 | 0172 | 0178 | 0179 | 0181 | 0182 | 0189 | 0190 | 0191 | 0192 | 0193 | 0194 | 0195 | 0196 | 0197 | 0198 | 0199 | 0200 | 0201 | 0202 | 0203 | 0204 | 0205 |                      |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + | + |   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon                  | A | + | + |   | + | + | + | + | + | + | A | + |   | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                  | A | + | + |   | + | + | + | + | + | + | A | + |   | + | + | + | + | + | + | + | + | + | + | + |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Basophilic Focus                        |   |   | X |   |   |   |   | X | X |   |   |   | X |   | X | X | X | X | X |   | X |   | X | X |
| Clear Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   | X |   |
| Degeneration, Cystic                    |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |
| Fatty Change                            |   | 2 |   | 2 | 3 |   |   | 3 | 2 |   |   | 3 | 4 |   | 2 |   |   |   |   |   | 2 |   |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                              |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   | X |   | X |   | X |   |   |   |   |   | X |   |   |   |
| Infiltration Cellular, Mononuclear Cell |   | 2 |   | 1 | 2 | 1 | 2 |   |   |   |   | 1 |   | 2 |   | 1 | 1 |   | 1 | 1 | 2 |   |   | 2 |
| Inflammation, Chronic Active            |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                          |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tension Lipidosis                       |   | 4 |   | 3 |   |   |   | 2 |   |   |   |   | 4 |   |   |   |   |   |   |   | 2 |   |   |   |
| Vacuolization Cytoplasmic               |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 2 |   |
| Bile Duct, Hyperplasia                  |   | 1 |   |   | 2 | 2 | 2 |   |   |   |   |   | 3 |   |   |   |   |   | 3 | 3 |   |   | 3 | 1 |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Biliary Tract, Fibrosis                 |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   | 1 |
| Hepatocyte, Necrosis                    |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Mesentery + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|------|------|
|  | 0630        | 0638 | 0542 | 0727 | 0622 | 0526 | 0668 | 0665 | 0449 | 0448 | 0554 | 0559 | 0724 | 0677 | 0722 | 0499 | 0647 | 0465 | 0720 | 0575 |           |                      | 0555 | 0727 | 0620 | 0575 | 0522 |
|  | 0171        | 0112 | 0118 | 0117 | 0117 | 0111 | 0111 | 0111 | 0111 | 0111 | 0333 | 0333 | 0333 | 0333 | 0333 | 0333 | 0333 | 0333 | 0333 | 0333 | 0666      | 0666                 | 0666 | 0666 | 0666 | 0666 | 0666 |

Fat, Necrosis

3 4

Pancreas  
 Infiltration Cellular, Lymphocyte  
 Inflammation, Chronic Active  
 Lipomatosis  
 Pigmentation  
 Acinus, Degeneration

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|   |   |   | 2 | 3 |   |   |   | 1 |   | 1 |   | 2 |   | 3 | 2 |   |   |   | 1 |   | 2 |   |   |   |   | 1 | 1 |
|   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
|   |   |   |   | 2 |   |   |   | 1 |   |   |   |   | 2 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
|   | 3 | 1 | 3 | 3 | 1 |   | 1 |   | 1 |   | 3 |   | 4 | 2 | 1 |   |   |   | 4 |   |   |   |   | 1 | 3 | 2 |   |

Stomach, Forestomach

|   |   |   |  |   |   |   |   |   |   |   |   |  |   |   |   |   |   |  |   |   |   |  |   |   |   |  |   |
|---|---|---|--|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|--|---|---|---|--|---|
| + | + | + |  | + | + | + | + | + | + | + | + |  | + | + | + | + | + |  | + | + | + |  | + | + | + |  | + |
|---|---|---|--|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|--|---|---|---|--|---|

Stomach, Glandular

|   |   |   |  |   |   |   |   |   |   |   |  |   |  |   |   |   |   |  |   |   |   |  |   |   |   |  |   |
|---|---|---|--|---|---|---|---|---|---|---|--|---|--|---|---|---|---|--|---|---|---|--|---|---|---|--|---|
| A | + | + |  | + | + | + | + | + | + | + |  | + |  | + | + | + | + |  | + | + | + |  | + | + | + |  | + |
|---|---|---|--|---|---|---|---|---|---|---|--|---|--|---|---|---|---|--|---|---|---|--|---|---|---|--|---|

Mineralization  
 Pigmentation  
 Epithelium, Hyperplasia

2  
 3  
 2

**CARDIOVASCULAR SYSTEM**

Blood Vessel

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Heart

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Cardiomyopathy  
 Mineralization

2  
 2

**ENDOCRINE SYSTEM**

Adrenal Cortex

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Angiectasis  
 Degeneration, Cystic  
 Hyperplasia

2  
 4  
 2

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|------|
|  | 0630        | 0638 | 0542 | 0727 | 0622 | 0526 | 0665 | 0664 | 0442 | 0448 | 0551 | 0558 | 0774 | 0673 | 0776 | 0446 | 0444 | 0667 | 0775 | 0070 |           |                      | 0557 | 0552 | 0778 |
| Hypertrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Metaplasia, Osseous                                      |             |      |      |      |      |      |      |      |      | 3    |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Pigmentation   |             |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |           |                      |      |      |      |
| Vacuolization Cytoplasmic                                |             |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      | 2    |           | 2                    |      |      |      |
| Adrenal Medulla  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | M    |
| Hyperplasia  |             | 2    | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |           |                      |      |      |      |
| Islets, Pancreatic                                       | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Hyperplasia  |             | 3    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Parathyroid Gland  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Hyperplasia  |             |      |      |      | 2    |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      | 1         |                      | 2    |      |      |
| Pituitary Gland  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Angiectasis  |             | 4    | 4    |      |      |      |      |      |      |      |      |      | 4    |      | 2    | 2    |      |      |      |      |           |                      |      |      |      |
| Hemorrhage   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Necrosis   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Pars Distalis, Cyst                                      |             |      |      |      |      |      |      |      |      |      | X    | X    |      |      |      |      |      |      |      |      |           |                      | X    |      |      |
| Pars Distalis, Hyperplasia                               |             |      |      | 4    | 3    | 3    | 3    | 3    | 3    | 3    | 4    |      |      |      | 2    | 3    | 2    | 2    | 2    | 3    |           | 4                    | 4    |      |      |
| Pars Distalis, Hypertrophy                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Pars Intermedia, Cyst                                    |             |      |      |      |      |      |      |      |      |      |      |      |      | X    | X    |      |      |      |      |      |           |                      |      |      |      |
| Thyroid Gland  | A           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    | +    | +    |
| Inflammation, Chronic Active                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |
| Ultimobranchial Cyst                                     |             |      |      |      |      |      |      |      |      | X    | X    |      | X    | X    | X    |      |      |      |      |      |           |                      |      |      |      |
| C-cell, Hyperplasia                                      |             | 1    | 1    |      | 2    |      | 1    | 2    | 1    |      |      |      |      | 1    | 1    | 1    |      |      |      |      | 2         | 1                    | 2    |      | 3    |
| Follicular Cell, Hyperplasia                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |      |      |      |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0630  | 0638  | 0542  | 0727  | 0622  | 0568  | 0665  | 0442  | 0445  | 0559  | 0729  | 0677  | 0422  | 0699  | 0475  | 0620  | 0775  | 0555  | 0727  | 0652  | 0075  | 0052  | 0728  | 0603  | females<br>(cont...) |
|  | ANIMAL ID   | 01771 | 01177 | 01178 | 01179 | 01180 | 01181 | 01182 | 01183 | 01184 | 01185 | 01186 | 01187 | 01188 | 01189 | 01190 | 01191 | 01192 | 01193 | 01194 | 01195 | 01196 | 01197 | 01198 | 01199 |                      |

NONE

GENITAL SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperkeratosis                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Plasma Cell       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Sertoliform                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bilateral, Follicle, Cyst                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bursa, Cyst                              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Follicle, Cyst                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oviduct                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dilatation                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Polymorphonuclear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metaplasia, Squamous                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrial Glands, Hyperplasia          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia, Cystic         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|  | 0630        | 0638 | 0654 | 0672 | 0665 | 0656 | 0666 | 0644 | 0644 | 0655 | 0655 | 0677 | 0666 | 0677 | 0644 | 0666 | 0644 | 0666 | 0677 | 0655 | 0655 | 0677 | 0666 | 0666 |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 01771     |                      |
|  | 1           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 07772     |                      |
|  | 7           | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 07781     |                      |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 0771      |                      |

Lumen, Dilatation

4

4

Vagina

A +

Infiltration Cellular, Polymorphonuclear

Epithelium, Degeneration

Epithelium, Hyperplasia

Epithelium, Mucification

3

2

4

3

2

4

4

4

1

3

4

2

1

2

1

2

1

2

1

2

1

2

1

2

1

2

1

1

HEMATOPOIETIC SYSTEM

Bone Marrow

Hypocellularity

+ + + + + + + + + + A + + + + + + + + + + + + +

3

Lymph Node

+

+

+

4

2

3

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

Lymph Node, Mandibular

+

+

+

3

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

Lymph Node, Mesenteric

+

Spleen

+ + + + + + + + + + A + + + + + + + + + + + + +

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|
|  | 0630        | 0638 | 0542 | 0727 | 0622 | 0526 | 0668 | 0665 | 0449 | 0448 | 0551 | 0558 | 0774 | 0673 | 0746 | 0462 | 0443 | 0679 | 0778 | 0556 |           |                      | 0556 | 0728 |
| Hematopoietic Cell Proliferation Necrosis                | 4           |      |      | 3    | 3    | 1    | 2    | 3    |      | 3    | 2    | 4    |      | 2    | 2    | 2    | 1    |      | 3    | 1    |           | 2                    | 3    |      |
| Pigmentation   |             | 4    | 3    |      |      | 2    | 2    | 1    | 4    | 2    |      | 2    | 2    |      | 2    | 1    |      |      | 4    |      | 2         | 4                    | 3    | 2    |
| Thymus Atrophy   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                    | +    |      |
|  |             | 4    | 3    | 4    | 4    | 4    | 3    | 4    | 4    | 3    | 4    | 4    | 4    | 4    |      | 3    | 4    | 3    | 4    | 4    | 4         | 4                    | 4    |      |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Atypical Focus       | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Galactocele                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Hyperplasia, Lobular               |   |   | 3 | 4 | 2 | 3 | 3 | 2 | 3 |   | 4 | 1 | 2 |   | 1 | 2 | 3 | 2 | 2 | 4 | 2 | 3 | 4 |
| Alveolus, Dilatation               |   |   | 3 |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   |   | 2 |   |   | 2 |   |   |
| Duct, Dilatation                   |   | 3 | 3 |   |   |   |   |   |   |   |   | 2 | 2 |   | 2 |   |   | 3 |   |   | 2 |   |   |
| Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Skin                               |   | + |   | + |   |   |   |   |   | + |   | + | + | + |   |   | + |   | + |   |   |   | + |
| Epithelium, Foot, Hyperplasia      |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |
| Foot, Edema                        |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |
| Foot, Fibrosis                     |   |   |   | 4 |   |   |   |   |   |   |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |
| Foot, Inflammation, Chronic Active |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |
| Foot, Necrosis                     |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |
| Foot, Ulcer                        |   |   |   | 4 |   |   |   |   |   | 4 |   | 4 | 4 |   |   |   |   | 4 |   |   |   |   | 4 |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | ANIMAL ID | females<br>(cont...) |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|
|  | 0630        | 0638 | 0542 | 0727 | 0652 | 0661 | 0664 | 0444 | 0445 | 0579 | 0576 | 0727 | 0673 | 0676 | 0464 | 0466 | 0772 | 0779 | 0550 | 0557 | 0728 | 0556 | 0728 | 0668 | 0661 | 0661 |           |                      | 0661 |
|  |             | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |           |                      |      |
|  |             | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 6    | 6    | 6    | 6    | 6    | 6    | 6         |                      |      |
|  |             | 7    | 7    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 9    | 0    | 0    | 0    | 0    | 0    | 0    | 1         |                      |      |
|  |             | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 1         |                      |      |

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem<br>Compression<br>Hemorrhage<br>Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   | 4 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Brain, Cerebellum  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum<br>Ventricle, Dilatation                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   | 3 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nerve Trigeminal<br>Axon, Degeneration                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Peripheral Nerve, Sciatic                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Peripheral Nerve, Tibial                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord, Cervical                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord, Lumbar<br>Axon, Degeneration                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord, Thoracic                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

RESPIRATORY SYSTEM

|                  |   |   |   |  |   |   |   |   |   |   |   |   |   |  |   |   |   |   |  |   |   |   |  |   |  |  |
|------------------|---|---|---|--|---|---|---|---|---|---|---|---|---|--|---|---|---|---|--|---|---|---|--|---|--|--|
| Lung<br>Fibrosis | + | + | + |  | + | + | + | + | + | + | + | + | + |  | + | + | + | + |  | + | + | + |  | + |  |  |
|                  |   |   |   |  |   |   |   |   |   |   |   |   | 3 |  |   |   |   |   |  |   |   |   |  |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS FEMALE</b><br><b>F1 250.0StDose F</b> | DAY ON TEST | 0630  | 0638  | 0542  | 0727  | 0622  | 0568  | 0665  | 0449  | 0448  | 0554  | 0552  | 0779  | 0672  | 0446  | 0644  | 0767  | 0575  | 0555  | 0772  | 0657  | 0678  | 0630  | females<br>(cont...) |
|   | ANIMAL ID   | 01771 | 01177 | 01178 | 01179 | 01180 | 01181 | 01182 | 01183 | 01184 | 01185 | 01186 | 01187 | 01188 | 01189 | 01190 | 01191 | 01192 | 01193 | 01194 | 01195 | 01196 | 01197 |                      |

NONE

URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Casts Protein                            |   |   | 2 |   |   |   |   |   | 4 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                           |   |   |   | 2 |   |   | 2 | 1 | 3 | 1 |   | 1 |   | 1 |   |   |   | 1 |   | 2 |   |   | 1 |
| Nephropathy                              |   | 1 |   |   | 1 | 1 |   | 1 |   | 1 |   |   | 2 | 1 |   |   | 1 |   | 1 | 2 | 1 | 1 | 1 |
| Cortex, Cyst                             |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |
| Renal Tubule, Cyst                       | X |   |   |   |   |   |   |   | X | X |   |   |   |   |   | X |   | X | X |   |   |   | X |
| Transitional Epithelium, Hyperplasia     |   |   | 2 | 1 |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0723 | 0728 | 0536 | 0733 | 0778 | 0778 | 0778 | 0462 | 0560 | 0655 | 0651 | 0745 | 0770 | 0776 | 0688 | 0661 | 0460 | 0768 | 0449 | 0443 | 0663 | 0506 | 0728 | * TOTALS |
|  | ANIMAL ID   | 0611 | 0612 | 0623 | 0633 | 0638 | 0678 | 0679 | 0679 | 0679 | 0680 | 0680 | 0680 | 0688 | 0688 | 0699 | 0699 | 0699 | 0699 | 0699 | 0699 | 0699 | 0699 | 0699 |          |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Esophagus                               |   |   | + | + |   | + |   | + | + | + | + | + |   |   | + | + | + | + | + |   | + | + | + | + | 37 |     |
| Intestine Large, Colon                  |   |   | + | + |   | + |   | + | + | + | + | + |   |   | + | + | + | + | + |   | + | + | + | + | 35 |     |
| Intestine Small, Ileum                  |   |   | + | + |   | + |   | + | + | + | + | + |   |   | + | + | + | + | + |   | + | + | + | + | 35 |     |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Angiectasis                             |   |   |   | 1 |   | 2 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  | 1.6 |
| Basophilic Focus                        |   |   |   | X | X | X | X | X |   | X |   |   | X | X |   | X | X | X | X |   | X |   | X | X | 28 |     |
| Clear Cell Focus                        |   | X | X | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7  |     |
| Degeneration, Cystic                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 5  | 1.0 |
| Fatty Change                            |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   | 3 | 1 | 2 | 2 |   |   |   |   | 1 | 2 | 2 | 18 | 2.1 |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   | 2  | 1.0 |
| Hemorrhage                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  |     |
| Infiltration Cellular, Mononuclear Cell |   | 1 |   |   | 2 |   | 1 |   |   | 1 |   |   | 1 | 1 | 1 | 1 |   | 1 |   | 2 |   |   | 1 | 2 | 25 | 1.4 |
| Inflammation, Chronic Active            |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 3  | 1.7 |
| Mineralization                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Tension Lipidosis                       |   |   |   | 2 |   |   |   | 4 | 3 | 4 |   | 3 |   |   |   |   | 4 |   | 3 |   |   | 4 |   |   | 13 | 3.2 |
| Vacuolization Cytoplasmic               |   |   | 2 |   |   |   | 1 |   |   | 2 | 2 | 1 |   | 1 |   |   |   |   | 2 |   |   |   |   |   | 9  | 1.7 |
| Bile Duct, Hyperplasia                  | 2 | 2 |   |   | 2 | 2 | 1 |   |   |   |   | 1 |   |   |   |   | 3 |   | 1 | 1 |   | 1 |   |   | 19 | 1.9 |
| Biliary Tract, Cyst                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Biliary Tract, Fibrosis                 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7  | 1.0 |
| Hepatocyte, Necrosis                    |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 3  | 1.7 |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 1  | 2.0 |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |   |      |                 |        |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|---|------|-----------------|--------|
|  | 0723        | 0728 | 0536 | 0730 | 0738 | 0746 | 0754 | 0462 | 0569 | 0674 | 0581 | 0689 | 0794 | 0702 | 0708 | 0616 | 0668 | 0441 | 0672 | 0449 |           |   | 0663 | 0550            | 0772   |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0 | 0    |                 |        |
|  | 6           | 6    | 6    | 6    | 6    | 7    | 7    | 7    | 7    | 8    | 8    | 8    | 8    | 8    | 8    | 9    | 9    | 9    | 9    | 9    | 9         | 9 | 9    |                 |        |
|  | 1           | 1    | 1    | 1    | 1    | 9    | 9    | 9    | 9    | 0    | 0    | 0    | 0    | 0    | 0    | 8    | 8    | 8    | 8    | 8    | 8         | 8 | 8    |                 |        |
|  | 1           | 2    | 2    | 3    | 3    | 8    | 8    | 9    | 9    | 0    | 0    | 1    | 1    | 2    | 2    | 2    | 2    | 3    | 3    | 4    | 4         | 5 | 5    |                 |        |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 2    | 1    | 2    | 2    | 1    | 2         | 1 | 2    |                 |        |
|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | <b>* TOTALS</b> |        |
| Fat, Necrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 2 3.5           |        |
| Pancreas   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | 49              |        |
| Infiltration Cellular, Lymphocyte                        |             |      |      |      | 2    | 1    |      | 1    | 1    | 1    | 2    |      | 1    |      | 2    | 2    | 1    | 2    | 1    | 1    | 1         | 1 | 3    | 28 1.6          |        |
| Inflammation, Chronic Active                             |             |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |           | 2 |      | 1 1.0           |        |
| Lipomatosis  |             |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |           |   |      | 4 2.0           |        |
| Pigmentation   |             |      | 1    |      | 1    |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |           |   | 1    | 8 1.3           |        |
| Acinus, Degeneration                                     | 2           |      | 1    |      | 3    | 2    |      | 2    | 2    | 2    | 3    |      | 2    | 1    |      | 3    | 3    | 1    | 4    | 1    | 1         | 1 | 1    | 4               | 35 2.1 |
| Stomach, Forestomach                                     |             |      | +    | +    |      | +    |      | +    | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      | +         | + | +    | 37              |        |
| Stomach, Glandular                                       |             |      | +    | +    |      | +    |      | +    | +    | +    | +    | +    |      |      | +    | +    | +    | +    | +    |      | +         | + | +    | 37              |        |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 1 2.0           |        |
| Pigmentation   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 1 3.0           |        |
| Epithelium, Hyperplasia                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 1 2.0           |        |
| <b>CARDIOVASCULAR SYSTEM</b>                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |        |
| Blood Vessel   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | 50              |        |
| Heart  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | 50              |        |
| Cardiomyopathy   |             |      | 1    |      | 2    | 2    | 1    | 1    | 1    | 2    |      |      | 2    | 2    | 3    |      | 1    | 2    | 1    | 1    | 1         | 1 | 2    | 37 1.5          |        |
| Mineralization   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | 1 2.0           |        |
| <b>ENDOCRINE SYSTEM</b>                                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                 |        |
| Adrenal Cortex   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    | 50              |        |
| Angiectasis  |             |      |      |      |      |      |      |      |      |      | 2    |      |      |      |      |      |      |      |      |      |           |   |      | 2 2.0           |        |
| Degeneration, Cystic                                     | 4           |      | 4    | 4    |      | 2    |      | 2    |      | 3    | 1    |      | 4    | 4    | 1    | 4    | 2    | 4    |      | 4    | 1         |   | 4    | 2               | 32 2.9 |
| Hyperplasia  | 1           |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 2    |      |      |      |      |           |   |      | 7 1.7           |        |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |           |          |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|-----------|----------|
|  | 0723        | 0728 | 0753 | 0773 | 0777 | 0777 | 0777 | 0744 | 0755 | 0766 | 0755 | 0766 | 0777 | 0777 | 0777 | 0766 | 0766 | 0744 | 0766 | 0777 |          | 0744 | 0744 | 0766 | 0755      | 0777     |
| ANIMAL ID  | 0611        | 0612 | 0661 | 0663 | 0666 | 0667 | 0677 | 0677 | 0677 | 0688 | 0688 | 0688 | 0688 | 0688 | 0688 | 0699 | 0699 | 0699 | 0699 | 0699 | 0699     | 0699 | 0699 | 0699 | 0699      |          |
| Hypertrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 3    |      |      |      |          |      |      |      |           | 2 2.5    |
| Metaplasia, Osseous                                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 1 3.0    |
| Pigmentation   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 1 2.0    |
| Vacuolization Cytoplasmic                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 2    |      |      |      |          |      |      |      |           | 6 2.0    |
| Adrenal Medulla Hyperplasia                              | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +         | 48 8 1.4 |
| Islets, Pancreatic Hyperplasia                           | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | +         | 49 1 3.0 |
| Parathyroid Gland Hyperplasia                            | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | 47 7 1.6  |          |
| Pituitary Gland Angiectasis                              | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | 50 12 3.4 |          |
| Pituitary Gland Hemorrhage                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 1 4.0    |
| Pituitary Gland Necrosis                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 1 4.0    |
| Pituitary Gland Pars Distalis, Cyst                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 3        |
| Pituitary Gland Pars Distalis, Hyperplasia               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 26 3.2   |
| Pituitary Gland Pars Distalis, Hypertrophy               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 3 2.7    |
| Pituitary Gland Pars Intermedia, Cyst                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 2        |
| Thyroid Gland Inflammation, Chronic Active               | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | 48 1 1.0  |          |
| Thyroid Gland Ultimobranchial Cyst                       |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 9        |
| Thyroid Gland C-cell, Hyperplasia                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 23 1.4   |
| Thyroid Gland Follicular Cell, Hyperplasia               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |           | 6 2.3    |

**GENERAL BODY SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F          | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |    |     |     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----|-----|-----|
|   | 0<br>7<br>2<br>3      | 0<br>7<br>2<br>8      | 0<br>5<br>3<br>6      | 0<br>7<br>0<br>3      | 0<br>7<br>2<br>8      | 0<br>7<br>0<br>8      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>2      | 0<br>5<br>9<br>0      | 0<br>6<br>4<br>5      | 0<br>5<br>4<br>1      | 0<br>6<br>5<br>5      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>6<br>8<br>6      | 0<br>4<br>8<br>1      | 0<br>6<br>8<br>0      | 0<br>7<br>2<br>8      | 0<br>4<br>5<br>1      | 0<br>4<br>4<br>9      |                       | 0<br>6<br>6<br>3      | 0<br>5<br>0<br>6      | 0<br>7<br>2<br>8      |    |     |     |
| ANIMAL ID   | 0<br>6<br>1<br>1<br>2 | 0<br>6<br>1<br>1<br>2 | 0<br>6<br>1<br>2<br>2 | 0<br>6<br>1<br>3<br>1 | 0<br>6<br>1<br>3<br>2 | 0<br>7<br>9<br>8<br>1 | 0<br>7<br>7<br>8<br>2 | 0<br>7<br>7<br>8<br>1 | 0<br>7<br>9<br>8<br>2 | 0<br>7<br>9<br>8<br>1 | 0<br>8<br>0<br>0<br>2 | 0<br>8<br>0<br>0<br>2 | 0<br>8<br>0<br>0<br>2 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>0<br>2<br>2 | 0<br>8<br>0<br>2<br>2 | 0<br>8<br>0<br>3<br>1 | 0<br>8<br>0<br>4<br>4 | 0<br>8<br>0<br>5<br>5 | 0<br>8<br>0<br>6<br>6 | 0<br>8<br>0<br>6<br>6 |    |     |     |
| Lumen, Dilatation   | 4                     |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 4.0                   |                       |                       |    |     |     |
| Vagina  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 49 |     |     |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration | 3                     |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     | 3.0                   |                       |                       |    |     |     |
| Epithelium, Hyperplasia   | 3                     |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     | 3.0                   |                       |                       |    |     |     |
| Epithelium, Mucification  | 2                     | 3                     | 4                     | 2                     | 4                     | 2                     | 3                     | 3                     | 4                     | 4                     | 2                     | 2                     | 2                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 4                     | 3                     | 3                     | 3                     | 3                     | 44 | 3.0 |     |
| <b>HEMATOPOIETIC SYSTEM</b>                                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |    |     |     |
| Bone Marrow Hypocellularity                                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 49 | 2   | 3.0 |
| Lymph Node Lumbar, Degeneration, Cystic                           | +                     |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 10                    | 4                     | 2.8                   |                       |    |     |     |
| Lymph Node Lumbar, Hyperplasia, Lymphoid                          |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 5                     | 3.4                   |                       |    |     |     |
| Lymph Node Lumbar, Infiltration Cellular, Plasma Cell             | 4                     |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 8                     | 4.0                   |                       |    |     |     |
| Lymph Node Popliteal, Hyperplasia, Lymphoid                       |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 1                     | 4.0                   |                       |    |     |     |
| Lymph Node Popliteal, Infiltration Cellular, Plasma Cell          |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 1                     | 4.0                   |                       |    |     |     |
| Lymph Node Renal, Hyperplasia, Lymphoid                           |                       |                       |                       |                       | 3                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     | 1                     | 3.0                   |                       |    |     |     |
| Lymph Node Renal, Infiltration Cellular, Plasma Cell              |                       |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 2                     | 4.0                   |                       |    |     |     |
| Lymph Node, Mandibular Degeneration, Cystic                       | +                     |                       |                       |                       | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 8                     | 5                     | 3.4                   |                       |    |     |     |
| Lymph Node, Mandibular Hyperplasia, Lymphoid                      | 3                     |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 7                     | 3.6                   |                       |    |     |     |
| Lymph Node, Mandibular Infiltration Cellular, Plasma Cell         | 3                     |                       |                       |                       | 4                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     | 7                     | 3.9                   |                       |    |     |     |
| Lymph Node, Mesenteric  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1  |     |     |
| Spleen  | +                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 49 |     |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>7<br>2<br>3      | 0<br>7<br>2<br>8      | 0<br>5<br>3<br>6      | 0<br>7<br>0<br>3      | 0<br>7<br>2<br>8      | 0<br>7<br>0<br>6      | 0<br>7<br>2<br>6      | 0<br>4<br>6<br>2      | 0<br>5<br>9<br>0      | 0<br>6<br>4<br>5      | 0<br>5<br>4<br>1      | 0<br>6<br>5<br>5      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>8      | 0<br>7<br>0<br>6      | 0<br>6<br>8<br>1      | 0<br>4<br>8<br>6      | 0<br>6<br>1<br>0      | 0<br>7<br>2<br>8      | 0<br>4<br>4<br>9      |                       | 0<br>4<br>6<br>3      | 0<br>5<br>0<br>6      | 0<br>7<br>2<br>8      |
| ANIMAL ID  | 0<br>6<br>1<br>1<br>2 | 0<br>6<br>1<br>1<br>2 | 0<br>6<br>1<br>2<br>2 | 0<br>6<br>1<br>3<br>1 | 0<br>6<br>1<br>3<br>2 | 0<br>7<br>9<br>8<br>1 | 0<br>7<br>9<br>8<br>2 | 0<br>7<br>9<br>8<br>1 | 0<br>7<br>9<br>8<br>0 | 0<br>7<br>9<br>8<br>0 | 0<br>8<br>0<br>0<br>2 | 0<br>8<br>0<br>0<br>1 | 0<br>8<br>0<br>0<br>1 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>0<br>1<br>2 | 0<br>8<br>8<br>2<br>2 | 0<br>8<br>8<br>3<br>2 | 0<br>8<br>8<br>3<br>2 | 0<br>8<br>8<br>4<br>1 | 0<br>8<br>8<br>4<br>2 | 0<br>8<br>8<br>5<br>1 | 0<br>8<br>8<br>5<br>6 | 0<br>8<br>8<br>6<br>1 | 0<br>9<br>8<br>6<br>2 |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |               |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|---------------|
| Hematopoietic Cell Proliferation |   |   |   |   | 2 |   | 2 | 2 | 4 | 4 | 3 | 2 | 3 | 4 | 1 | 2 | 3 | 2 | 3 | 2 | 4 | 3 |   |   | 3 | <b>35 2.5</b> |               |
| Necrosis                         | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2 4.0</b>  |               |
| Pigmentation                     |   | 1 |   |   | 2 | 3 | 2 |   |   |   |   | 2 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 1 | 3             | <b>35 2.2</b> |
| Thymus Atrophy                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b>     |               |
|                                  |   | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | <b>47 3.8</b> |               |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               |              |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|--------------|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b>     |              |
| Atypical Focus                     | 3 |   |   |   |   |   |   |   |   | 2 |   |   |   | 2 | 1 |   |   |   |   |   |   | 2 |   |   | 1             | <b>8 1.8</b> |
| Galactocele                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               | <b>1</b>     |
| Hyperplasia, Lobular               | 4 | 4 | 2 | 2 |   | 3 | 3 | 4 | 4 | 4 |   | 4 | 3 | 4 | 4 | 3 | 4 |   |   | 3 | 4 | 3 | 4 | 3 | <b>39 3.1</b> |              |
| Alveolus, Dilatation               |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |               | <b>8 2.3</b> |
| Duct, Dilatation                   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |               | <b>9 2.3</b> |
| Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |               | <b>1 2.0</b> |
| Skin                               |   | + |   | + | + |   | + | + | + |   |   |   |   |   | + |   |   |   |   | + |   | + |   | + | <b>19</b>     |              |
| Epithelium, Foot, Hyperplasia      |   | 4 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   | 4 | <b>14 4.0</b> |              |
| Foot, Edema                        |   | 3 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   | 4 | <b>12 3.9</b> |              |
| Foot, Fibrosis                     |   | 4 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   |   |   | 4 |   | 4 | <b>12 4.0</b> |              |
| Foot, Inflammation, Chronic Active |   | 4 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   | 4 | <b>14 4.0</b> |              |
| Foot, Necrosis                     |   | 4 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   | 4 | <b>14 4.0</b> |              |
| Foot, Ulcer                        |   | 4 |   |   |   |   | 4 | 4 | 4 |   |   |   |   |   | 4 |   |   |   |   | 4 |   | 4 |   | 4 | <b>14 4.0</b> |              |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |          |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b> |          |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | +         | <b>1</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|  | ANIMAL ID   | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 4 | 6 | 7 | 4 | 4 | 6 | 5 | 7 | 2 |          |
|  |             | 2 | 2 | 3 | 0 | 2 | 0 | 2 | 6 | 9 | 4 | 4 | 5 | 3 | 2 | 0 | 8 | 9 | 8 | 1 | 2 | 5 | 4 | 6 | 0 | 2 | 8 |          |
|  |             | 3 | 8 | 6 | 3 | 8 | 8 | 6 | 2 | 0 | 5 | 1 | 5 | 0 | 8 | 6 | 8 | 1 | 6 | 0 | 8 | 1 | 9 | 3 | 6 | 0 | 8 |          |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          |
|  |             | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |          |
|  |             | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |          |
|  |             | 1 | 2 | 2 | 3 | 3 | 8 | 8 | 9 | 9 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 |   |          |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 2 |   |          |

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Compression               |   |   | 1 |   |   |   | 3 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |    | 11 2.4 |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 4.0  |
| Necrosis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Ventricle, Dilatation     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 2.0  |
| Nerve Trigeminal          | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |
| Axon, Degeneration        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 1.5  |
| Peripheral Nerve, Sciatic | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |
| Peripheral Nerve, Tibial  | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |
| Spinal Cord, Cervical     | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |
| Spinal Cord, Lumbar       | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |
| Axon, Degeneration        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 1.0  |
| Spinal Cord, Thoracic     | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |        |

**RESPIRATORY SYSTEM**

|          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |       |
|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-------|
| Lung     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 40 |       |
| Fibrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    | 1 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 250.0StDose F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | ANIMAL ID   | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 4 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 4 | 6 | 7 | 4 | 4 | 6 | 5 | 7 |

|                                    |  | 2 | 8 | 3 | 0 | 2 | 0 | 2 | 6 | 9 | 4 | 4 | 5 | 3 | 2 | 0 | 8 | 9 | 8 | 1 | 2 | 5 | 4 | 6 | 0 | 2 |
|------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Foreign Body                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                         |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Histiocyte  |  |   |   | 1 |   |   | 2 |   |   |   |   |   | 1 | 2 |   |   |   | 3 | 2 |   |   |   |   |   |   |   |
| Inflammation, Chronic Active       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigmentation                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar Epithelium, Hyperplasia   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |
| Mediastinum, Foreign Body          |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinum, Inflammation, Chronic |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mediastinum, Necrosis              |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>* TOTALS</b>                    |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|  |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
|--|--|--|--|---|---|--|---|---|---|---|---|--|--|--|---|---|---|---|---|--|---|---|---|---|--|
| Nose   |  |  |  | + | + |  | + | + | + | + | + |  |  |  | + | + | + | + | + |  | + | + | + | + |  |
| Fibrosis   |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Foreign Body   |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   | X |   |  |
| Inflammation, Suppurative                              |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   | 1 |   |  |
| Inflammation, Chronic Active                           |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet    |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet  |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell       |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Respiratory Epithelium, Ulcer                          |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Transitional Epithelium, Accumulation, Hyaline Droplet |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Upper Molar, Inflammation, Chronic Active              |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| <b>* TOTALS</b>  |  |  |  |   |   |  |   |   |   |   |   |  |  |  |   |   |   |   |   |  |   |   |   |   |  |
| Trachea  |  |  |  | + | + |  | + | + | + | + | + |  |  |  | + | + | + | + | + |  | + | + | + | + |  |

SPECIAL SENSES SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked









Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 0647        | 0727  | 0651  | 0727  | 0661  | 0661  | 0663  | 0391  | 0726  | 0664  | 0667  | 0579  | 0668  | 0488  | 0591  | 0728  | 0775  | 0663  | 0552  | 0554  | 0556  | 0729  | 0448  | 0142  |                      |
| ANIMAL ID  | 01931       | 01932 | 01934 | 01942 | 01945 | 01946 | 01947 | 01949 | 01949 | 01950 | 01950 | 01951 | 01951 | 01952 | 01952 | 01953 | 01953 | 01954 | 01954 | 01955 | 01955 | 01956 | 01956 | 01957 |                      |
| Angiectasis  |             |       |       | 2     |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |                      |
| Degeneration, Cystic Hyperplasia                         | 2           |       | 3     | 4     | 2     | 2     |       |       | 4     |       | 2     | 1     | 3     |       |       | 4     | 2     | 3     |       | 4     | 3     | 2     |       |       |                      |
| Vacuolization Cytoplasmic                                |             | 1     | 2     |       |       |       | 1     |       |       |       | 2     | 2     |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Adrenal Medulla  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Degeneration, Cystic Hyperplasia                         |             |       |       |       |       |       |       |       | 1     | 1     |       | 1     |       |       |       |       |       | 1     |       |       | 2     |       |       |       |                      |
| Islets, Pancreatic                                       | +           | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Parathyroid Gland Hyperplasia                            | M           | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 2     | +     | +     |                      |
| Pituitary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Angiectasis  | 4           |       |       |       |       |       | 2     |       |       | 4     |       |       |       |       | 4     | 4     | 3     | 4     |       |       |       | 4     |       |       |                      |
| Hemorrhage   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       |       |                      |
| Pars Distalis, Cyst                                      |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       | X     | X     |       |       |       |       |       |       |       |                      |
| Pars Distalis, Hyperplasia                               |             | 4     | 4     |       | 4     | 3     | 4     |       |       | 4     | 2     | 4     | 2     |       | 4     |       |       | 3     | 4     | 4     |       | 3     |       |       |                      |
| Pars Intermedia, Vacuolization Cytoplasmic               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       |                      |
| Rathke's Cleft, Cyst                                     |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                      |
| Ultimobranchial Cyst                                     |             | X     |       |       | X     | X     |       |       |       |       |       |       |       |       | X     | X     |       |       |       |       |       |       | X     |       |                      |
| C-cell, Hyperplasia                                      |             | 2     | 1     |       | 2     | 3     | 1     |       | 1     | 3     | 3     | 1     | 2     | 2     |       | 2     |       | 1     |       | 1     |       | 4     | 4     |       |                      |
| Follicular Cell, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |

GENERAL BODY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>6<br>4<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>6<br>6<br>5      | 0<br>6<br>3<br>1      | 0<br>3<br>9<br>1      | 0<br>7<br>6<br>6      | 0<br>6<br>4<br>3      | 0<br>6<br>4<br>7      | 0<br>5<br>0<br>7      | 0<br>7<br>2<br>9      | 0<br>6<br>8<br>5      | 0<br>4<br>8<br>9      | 0<br>5<br>2<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>5      | 0<br>6<br>9<br>3      | 0<br>5<br>0<br>5      |                       |                       | 0<br>5<br>5<br>2      | 0<br>5<br>6<br>4      | 0<br>7<br>2<br>9      | 0<br>4<br>4<br>8      |
|  | 0<br>1<br>9<br>3<br>1 | 0<br>1<br>9<br>3<br>2 | 0<br>1<br>9<br>4<br>1 | 0<br>1<br>9<br>4<br>2 | 0<br>1<br>9<br>5<br>1 | 0<br>1<br>9<br>5<br>2 | 0<br>1<br>9<br>6<br>1 | 0<br>1<br>9<br>6<br>2 | 0<br>1<br>9<br>7<br>1 | 0<br>1<br>9<br>7<br>2 | 0<br>4<br>9<br>7<br>1 | 0<br>4<br>9<br>7<br>2 | 0<br>4<br>0<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>4<br>1<br>1<br>2 | 0<br>6<br>2<br>3<br>1 | 0<br>6<br>2<br>5<br>2 | 0<br>6<br>2<br>6<br>1 | 0<br>6<br>2<br>6<br>2 | 0<br>6<br>2<br>6<br>7 | 0<br>6<br>2<br>7<br>1 |

**GENITAL SYSTEM**

|  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland                           | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperkeratosis                           | 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation                         | 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fat Pad, Ovarian/parametrial             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Necrosis                                 |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                                    | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  | 4 3 4 3 3 3 3 3 4 3 2 3 2 2 3 3 2 2 2 2 4 2 4     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                                     |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Sertoliform                 | 1 2 1 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Infiltration Cellular, Polymorphonuclear |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bilateral, Cyst                          |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Follicle, Cyst                           | X   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oviduct                                  | + + + + + + + + + + + + + + A + + + + + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                                   | + + + + + + + + + + + + + + A + + + + + + + + + + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenomyosis                              |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                                  | 3 3 3 3   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dilatation                               | 2 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Stromal                     | 4 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metaplasia, Squamous                     | 1 1 2 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cervix, Hyperplasia, Stromal             |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrial Glands, Hyperplasia          | 4 4   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia                 | 2 2 2 2 2 1                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia, Cystic         | 4 2 3 2 4 2 2 3 2 2 4 2                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | ANIMAL ID             | females<br>(cont...)  |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>6<br>4<br>7      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>7<br>2<br>7      | 0<br>6<br>5<br>1      | 0<br>6<br>6<br>5      | 0<br>6<br>3<br>1      | 0<br>3<br>9<br>1      | 0<br>7<br>2<br>6      | 0<br>6<br>4<br>3      | 0<br>6<br>4<br>7      | 0<br>5<br>0<br>7      | 0<br>7<br>2<br>9      | 0<br>6<br>8<br>5      | 0<br>4<br>8<br>9      | 0<br>5<br>9<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>5      | 0<br>6<br>9<br>3      | 0<br>5<br>5<br>5      |                       |                       | 0<br>5<br>6<br>4      | 0<br>7<br>2<br>9      | 0<br>4<br>4<br>8      | 0<br>1<br>4<br>2      |
|  | 0<br>1<br>9<br>3<br>1 | 0<br>1<br>9<br>3<br>2 | 0<br>1<br>9<br>4<br>1 | 0<br>1<br>9<br>4<br>2 | 0<br>1<br>9<br>5<br>1 | 0<br>1<br>9<br>5<br>2 | 0<br>1<br>9<br>6<br>1 | 0<br>1<br>9<br>6<br>2 | 0<br>1<br>9<br>7<br>1 | 0<br>1<br>9<br>7<br>2 | 0<br>4<br>9<br>7<br>1 | 0<br>4<br>0<br>9<br>2 | 0<br>4<br>4<br>9<br>1 | 0<br>4<br>4<br>1<br>2 | 0<br>4<br>4<br>1<br>1 | 0<br>4<br>4<br>1<br>2 | 0<br>4<br>4<br>2<br>1 | 0<br>4<br>4<br>2<br>2 | 0<br>4<br>4<br>3<br>1 | 0<br>6<br>2<br>5<br>2 | 0<br>6<br>2<br>5<br>1 | 0<br>6<br>2<br>5<br>2 | 0<br>6<br>2<br>6<br>1 | 0<br>6<br>2<br>6<br>2 | 0<br>6<br>2<br>6<br>7 | 0<br>6<br>2<br>7<br>1 |

Lumen, Dilatation

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vagina  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |   |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 | 2 | 4 |   |   |   |   |   |   |   |
| Epithelium, Hyperplasia   | 4 | 2 | 3 |   | 4 | 3 |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   | 3 |   |   |
| Epithelium, Mucification  |   | 3 | 2 | 3 |   | 4 | 2 |   | 4 | 4 | 4 | 2 | 4 | 4 |   | 4 | 2 | 2 | 3 | 4 | 4 |   |   | 3 |   |   |   |
| Lumen, Dilatation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypocellularity                            |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Myeloid Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                                 |   |   |   |   |   |   | + |   |   |   |   |   |   |   | + |   |   |   | + | + |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic               |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid              |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 4 |   |   |
| Renal, Infiltration Cellular, Plasma Cell  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Lymph Node, Mandibular                     | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                       | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphoid                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Plasma Cell         | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spleen                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic Cell Proliferation           |   | 3 |   | 2 |   | 2 | 4 |   | 2 | 4 | 3 | 2 | 3 |   |   | 4 | 2 | 3 | 3 | 4 | 4 | 2 |   |   | 2 | 2 |   |
| Necrosis                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----------|----------------------|
|  | 0647        | 0725 | 0671 | 0725 | 0666 | 0663 | 0639 | 0724 | 0664 | 0667 | 0570 | 0768 | 0489 | 0572 | 0775 | 0669 | 0552 | 0555 | 0556 | 0729 | 0448 | 0144 | 0014 |       |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 11931 |           |                      |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 11993 |           |                      |
|  | 3           | 3    | 4    | 4    | 5    | 5    | 6    | 6    | 7    | 7    | 9    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 331   |           |                      |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 21    |           |                      |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pigmentation                 | 4 | 3 | 3 | 2 | 2 |   | 1 | 3 | 2 |   | 1 |   |   |   |   | 1 |   |   |   | 2 | 2 | 3 | 2 | 3 |
| Capsule, Cyst                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thymus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M |
| Atrophy                      | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |   | 3 |
| Cyst                         |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelial Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atypical Focus                     |   | 2 |   | 4 |   |   |   |   | 4 | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Hyperplasia, Lobular               | 2 | 4 | 2 | 4 | 2 | 3 | 4 |   | 4 | 4 | 4 | 1 | 3 | 4 | 4 | 4 |   | 4 | 4 | 1 | 4 |   |   |   |
| Alveolus, Dilatation               | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Duct, Dilatation                   | 2 | 3 | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 2 |   |   |
| Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Skin                               |   |   | + |   |   |   | + |   |   |   |   |   | + | + | + | + |   | + | + |   | + | + |   |   |
| Inflammation, Suppurative          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Granulomatous        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Osseous                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Foot, Hyperplasia      |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   | 4 | 4 |   | 4 |   |   |   |   |   |
| Foot, Edema                        |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 2 |   |   | 2 |   | 4 | 4 |   | 3 |   |   |   |
| Foot, Fibrosis                     |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   | 4 |   | 4 | 4 |   | 4 |   |   |   |
| Foot, Inflammation, Chronic Active |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   | 4 |   | 4 | 4 |   | 4 |   |   |   |
| Foot, Necrosis                     |   |   | 4 |   |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   | 4 | 4 |   |   |   |   |   |
| Foot, Ulcer                        |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 | 4 |   | 4 |   | 4 | 4 |   | 3 |   |   |   |

MUSCULOSKELETAL SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |       |       |
|--|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F |  | 0647        | 0727  | 0651  | 0727  | 0661  | 0661  | 0391  | 0726  | 0664  | 0647  | 0579  | 0668  | 0489  | 0591  | 0728  | 0775  | 0693  | 0550  | 0556  | 0729  |                      | 0488  | 0144  |
| ANIMAL ID  |  | 01931       | 01932 | 01934 | 01942 | 01951 | 01952 | 01962 | 01967 | 01991 | 01994 | 01999 | 02000 | 02001 | 02002 | 02004 | 02005 | 02006 | 02007 | 02008 | 02009 |                      | 02011 | 02012 |

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

NERVOUS SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem<br>Compression<br>Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 4 |   |   | 1 | 3 |   |   |   | 2 |   | 2 |   |   |   |   | 2 | 1 |   | 2 |   |   | 4 |   |
| Brain, Cerebellum<br>Hemorrhage                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebrum<br>Ventricle, Dilatation       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  | 1 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |
| Nerve Trigeminal<br>Axon, Degeneration         |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |
|  |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |
| Peripheral Nerve, Sciatic                      |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |
| Peripheral Nerve, Tibial                       |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |
| Spinal Cord, Cervical<br>Axon, Degeneration    |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Spinal Cord, Lumbar<br>Axon, Degeneration      |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |
|  |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Spinal Cord, Thoracic<br>Axon, Degeneration    |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | + |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|------|------|----------------------|
|  | 0647        | 0727 | 0651 | 0727 | 0661 | 0666 | 0391 | 0726 | 0664 | 0667 | 0570 | 0729 | 0668 | 0489 | 0572 | 0775 | 0663 | 0552 | 0554 | 0564 |           |                      | 0729 | 0448 | 0142                 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 1193 | females<br>(cont...) |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0                    | 0    | 1199 |                      |
|  | 3           | 3    | 4    | 4    | 5    | 5    | 6    | 7    | 7    | 9    | 9    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1         | 1                    | 1    | 331  |                      |
|  | 1           | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1         | 2                    | 1    | 12   |                      |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage  |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |
| Infiltration Cellular, Histiocyte                     |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 4 |   |   | 1 |   |   |   |   |   | 4 |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic                                 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Metaplasia, Osseous                                   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Alveolar Epithelium, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + |   | + | + | + | + |   | + | + | + |   | + | A | + |   |   | + | + | + | + |   | + |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Trachea   | + | + |   | + | + | + | + |   | + | + | + |   | + | A | + |   |   | + | + | + | + |   | + |

**SPECIAL SENSES SYSTEM**

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cataract                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Anterior Chamber, Edema |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retina, Degeneration    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | females<br>(cont...) |   |   |  |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|---|---|--|
|  | ANIMAL ID   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                      | 0 | 0 |  |
|  | 6           | 7 | 6 | 7 | 6 | 6 | 6 | 3 | 7 | 6 | 6 | 5 | 7 | 6 | 4 | 5 | 7 | 7 | 6 | 5 | 5 | 5 | 7                    | 4 | 1 |  |
|  | 4           | 2 | 5 | 2 | 5 | 6 | 3 | 9 | 2 | 4 | 4 | 0 | 2 | 8 | 8 | 9 | 2 | 2 | 9 | 0 | 5 | 6 | 2                    | 4 | 4 |  |
|  | 7           | 7 | 1 | 7 | 1 | 5 | 1 | 1 | 6 | 3 | 7 | 7 | 9 | 5 | 9 | 1 | 8 | 5 | 3 | 5 | 2 | 4 | 9                    | 8 | 2 |  |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0                    | 0 | 0 |  |
|  | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6                    | 6 | 6 |  |
|  | 9           | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2                    | 2 | 2 |  |
|  | 3           | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 7 | 9 | 9 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6                    | 6 | 7 |  |
|  | 1           | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1                    | 2 | 1 |  |

### URINARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Casts Protein                            |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| Infarct                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineralization                           |   | 1 |   |   |   | 1 | 2 |   |   | 1 | 1 |   | 1 | 2 | 3 |   |   |   |   | 3 |   |   |   | 2 |
| Nephropathy                              | 2 | 3 | 1 | 2 | 1 |   |   |   |   | 2 | 1 |   | 1 |   |   |   |   | 1 |   | 1 | 2 |   | 2 | 4 |
| Cortex, Cyst                             |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |
| Renal Tubule, Cyst                       |   | X |   |   |   |   |   |   |   |   |   | X | X | X |   | X | X |   |   |   |   | X |   | X |
| Transitional Epithelium, Hyperplasia     |   |   |   |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |
| Congestion                               |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |      |   |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|------|---|
|  | 0471        | 0728   | 0729   | 0641   | 0669   | 0755   | 0656   | 0543   | 0554   | 0773   | 0573   | 0753   | 0668   | 0668   | 0666   | 0774   | 0778   | 0552   | 0557   | 0778   |          | 0777 |   |
| ANIMAL ID  | 062272      | 062281 | 062282 | 062291 | 062292 | 062293 | 062294 | 062295 | 062296 | 062297 | 062298 | 062299 | 062300 | 062301 | 062302 | 062303 | 062304 | 062305 | 062306 | 062307 | 062308   |      |   |
|  | 0           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0        |      |   |
|  | 0           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 1      | 1        | 1    | 1 |

Hepatocyte, Necrosis 2 1.0  
Oval Cell, Hyperplasia 1 1.0

Mesentery + 1  
Fat, Necrosis 4 4.0

Pancreas + 49  
Basophilic Focus X 2  
Infiltration Cellular, Lymphocyte 1 1 1 1 1 1 1 1 1 1 3 1 1 3 3 2 32 1.5  
Inflammation, Chronic Active 3 2 2.5  
Lipomatosis 3 6 2.7  
Necrosis 2 1 2.0  
Pigmentation 1 1 1 2 2 11 1.2  
Acinar Cell, Hyperplasia 3 1 3.0  
Acinus, Degeneration 2 2 2 1 1 2 1 2 1 2 4 1 3 4 2 34 2.1

Stomach, Forestomach + + + + + + + + + + + + + + + + + + 34

Stomach, Glandular + 32  
Diverticulum X 1

**CARDIOVASCULAR SYSTEM**

Blood Vessel + 50

Heart + 50  
Cardiomyopathy 3 1 1 1 2 1 2 2 2 1 2 2 2 1 2 3 1 35 1.7

**ENDOCRINE SYSTEM**

Adrenal Cortex + 50

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically M .. Missing tissue 1-4 .. Lesion qualified as:  
X .. Lesion present A .. Autolysis precludes evaluation 1) Minimal 3) Moderate  
I .. Insufficient tissue BLANK .. Not examined microscopically 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |        |        |       |        |        |
|--|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|-------|--------|--------|
|  | 0471        | 0728   | 0729   | 0641   | 0669   | 0725   | 0569   | 0573   | 0447   | 0553   | 0727   | 0583   | 0728   | 0667   | 0668   | 0669   | 0724   | 0728   | 0521   | 0557   |          | 0728   | 0727   | 0727  |        |        |
| ANIMAL ID  | 062272      | 062281 | 062282 | 062221 | 062222 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211 | 062211   | 062211 | 062211 |       |        |        |
| Angiectasis  |             |        | 3      |        |        |        |        | 2      |        |        |        |        |        |        |        |        |        |        |        |        |          |        | 2      | 6 2.3 |        |        |
| Degeneration, Cystic                                     |             | 4      | 2      | 2      | 3      | 4      | 3      |        |        |        |        | 4      | 2      | 3      |        | 4      | 2      | 4      | 2      |        | 4        | 3      | 3      | 3     | 1      | 33 2.8 |
| Hyperplasia  |             | 2      |        |        | 3      |        |        |        |        |        | 2      |        |        |        |        |        |        |        |        |        |          |        |        |       | 3 2.3  |        |
| Vacuolization Cytoplasmic                                |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |        |       | 5 1.6  |        |
| Adrenal Medulla  | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | +      | +      | +     | 50     |        |
| Degeneration, Cystic                                     |             |        |        |        |        |        |        |        |        |        |        |        | 2      |        |        |        |        |        |        |        |          |        |        |       | 1 2.0  |        |
| Hyperplasia  |             | 1      |        |        |        | 1      |        |        |        |        |        |        |        | 2      |        |        |        |        |        |        |          |        |        |       | 8 1.3  |        |
| Islets, Pancreatic                                       | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | +      | +      | +     | 49     |        |
| Parathyroid Gland  | +           | +      | M      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | +      | +      | +     | 47     |        |
| Hyperplasia  |             | 2      |        |        |        |        |        |        |        | 3      |        |        |        | 4      |        |        |        |        |        |        |          |        | 2      |       | 5 2.6  |        |
| Pituitary Gland  | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | +      | +      | +     | 50     |        |
| Angiectasis  |             | 4      |        |        | 4      | 4      |        |        |        |        |        | 4      |        |        |        |        |        |        | 3      |        | 4        |        |        |       | 14 3.7 |        |
| Hemorrhage   |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |        |       | 1 4.0  |        |
| Pars Distalis, Cyst                                      | X           |        |        |        |        |        |        |        |        |        |        |        |        |        | X      |        |        |        |        |        |          |        |        |       | 5      |        |
| Pars Distalis, Hyperplasia                               | 4           |        |        |        | 4      |        |        |        |        | 2      | 4      | 3      |        | 2      | 1      | 2      | 2      | 3      |        | 4      |          | 2      | 1      | 1     | 28 3.0 |        |
| Pars Intermedia, Vacuolization Cytoplasmic               |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |        |       | 1 3.0  |        |
| Rathke's Cleft, Cyst                                     |             |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |        |       | 1      |        |
| Thyroid Gland  | +           | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +        | +      | +      | +     | 50     |        |
| Ultimobranchial Cyst                                     | X           | X      |        |        | X      | X      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        | X      |       | 11     |        |
| C-cell, Hyperplasia                                      |             | 1      | 2      |        |        | 1      | 1      | 2      | 2      |        | 2      |        |        | 2      | 2      |        |        |        |        | 1      |          |        | 3      |       | 28 1.9 |        |
| Follicular Cell, Hyperplasia                             |             |        |        |        |        |        |        |        |        |        |        |        | 2      |        | 3      | 3      | 2      |        |        |        | 2        |        |        |       | 5 2.4  |        |

GENERAL BODY SYSTEM

NONE

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |     |    |    |     |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|-----|----|----|-----|
|  | 04          | 07 | 07 | 06 | 06 | 07 | 05 | 06 | 05 | 04 | 05 | 07 | 05 | 07 | 06 | 06 | 06 | 06 | 07 | 07 |          | 05  | 05 | 07 | 07  |
| ANIMAL ID  | 06          | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 09 | 09 | 09 | 09 | 09 | 09       | 09  | 09 | 09 | 09  |
| Lumen, Dilatation  | 4           |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 2        | 3.5 |    |    |     |
| Vagina   | +           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 49 |     |
| Atrophy  |             |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 1        | 3.0 |    |    |     |
| Infiltration Cellular, Polymorphonuclear                 |             |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 2        | 2.5 |    |    |     |
| Epithelium, Degeneration                                 | 4           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 3        | 3.2 |    |    |     |
| Epithelium, Hyperplasia                                  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 7        | 3.0 |    |    |     |
| Epithelium, Mucification                                 | 2           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    | 4        | 3.4 |    |    |     |
| Lumen, Dilatation  |             |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 1        | 3.0 |    |    |     |
| <b>HEMATOPOIETIC SYSTEM</b>                              |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    |    |     |
| Bone Marrow  | +           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 49 |     |
| Hypocellularity  | 4           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 2        | 4.0 |    |    |     |
| Myeloid Cell, Hyperplasia                                |             |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 3        | 3.0 |    |    |     |
| Lymph Node   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 4  |     |
| Lumbar, Degeneration, Cystic                             |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 2  | 2.0 |
| Lumbar, Hyperplasia, Lymphoid                            |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 2  | 3.0 |
| Lumbar, Infiltration Cellular, Plasma Cell               |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 3  | 4.0 |
| Renal, Infiltration Cellular, Plasma Cell                |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 1  | 4.0 |
| Lymph Node, Mandibular                                   | +           |    |    |    |    |    |    |    |    |    | +  |    |    |    |    |    |    |    |    |    | 6        |     |    |    |     |
| Degeneration, Cystic                                     | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    | 3        | 3.7 |    |    |     |
| Hyperplasia, Lymphoid                                    | 3           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    | 3        | 3.7 |    |    |     |
| Infiltration Cellular, Plasma Cell                       | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    | 4        | 3.8 |    |    |     |
| Spleen   | +           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |     |    | 49 |     |
| Hematopoietic Cell Proliferation                         | 1           |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |    |    | 4        | 2.6 |    |    |     |
| Necrosis   |             |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    | 1        | 4.0 |    |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |    |    |     |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|-----|
|  | 04          | 07 | 07 | 06 | 06 | 07 | 05 | 06 | 05 | 04 | 05 | 07 | 05 | 07 | 06 | 06 | 06 | 07 | 07 | 05 |          |    | 05 | 07 | 07  |
| ANIMAL ID  | 06          | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 09 | 09 | 09 | 09 | 09 | 09       | 09 | 09 | 09 |     |
| Pigmentation   |             | 2  | 3  | 4  |    | 2  | 2  | 2  |    | 4  | 2  | 3  |    | 3  | 1  | 2  | 1  | 4  |    | 3  | 3        |    | 4  | 32 | 2.5 |
| Capsule, Cyst  |             |    |    |    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  |     |
| Thymus   | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +        | +  | +  | 49 |     |
| Atrophy  | 3           | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4        | 4  | 4  | 47 | 3.9 |
| Cyst   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  |     |
| Epithelial Cell, Hyperplasia                             |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  | 3.0 |
| <b>INTEGUMENTARY SYSTEM</b>                              |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |     |
| Mammary Gland  | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +        | +  | +  | 50 |     |
| Atypical Focus   |             |    |    |    |    |    |    |    |    |    |    | 2  | 2  |    |    |    |    |    |    |    |          |    |    | 7  | 2.6 |
| Hyperplasia, Lobular                                     | 1           |    | 4  | 3  |    | 4  | 4  | 4  | 2  | 3  | 3  | 4  | 2  | 4  |    | 3  |    |    | 4  | 4  | 3        |    | 4  | 36 | 3.3 |
| Alveolus, Dilatation                                     |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    | 2  | 3  | 1.7 |
| Duct, Dilatation   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    | 2  | 7  | 2.1 |
| Duct, Hyperplasia  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  | 3.0 |
| Skin   | +           |    |    |    |    |    | +  |    | +  |    |    | +  | +  |    | +  |    |    |    |    |    |          |    |    | 16 |     |
| Inflammation, Suppurative                                |             |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  | 4.0 |
| Inflammation, Granulomatous                              |             |    |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |          |    |    | 1  | 4.0 |
| Metaplasia, Osseous                                      |             |    |    |    |    |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |          |    |    | 1  | 3.0 |
| Ulcer  |             |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 1  | 4.0 |
| Epithelium, Foot, Hyperplasia                            | 4           |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |    |          |    |    | 10 | 4.0 |
| Foot, Edema  | 4           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    | 8  | 3.4 |
| Foot, Fibrosis   | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |          |    |    | 10 | 4.0 |
| Foot, Inflammation, Chronic Active                       | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |          |    |    | 10 | 4.0 |
| Foot, Necrosis   | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |          |    |    | 7  | 4.0 |
| Foot, Ulcer  | 4           |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    |    |    |          |    |    | 10 | 3.9 |
| <b>MUSCULOSKELETAL SYSTEM</b>                            |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |    |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |           | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |     |     |     |     |
|--|-----------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|
|  |           | 04          | 07  | 07  | 06  | 06  | 07  | 05  | 06  | 05  | 04  | 05  | 07  | 05  | 07  | 06  | 06  | 06  | 07  | 07  | 05  |          | 05  | 07  | 07  | 07  |
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | ANIMAL ID | 071         | 078 | 079 | 064 | 065 | 072 | 056 | 067 | 054 | 079 | 043 | 057 | 033 | 073 | 088 | 067 | 068 | 066 | 079 | 072 | 022      | 058 | 072 | 072 |     |
|  |           | 062         | 062 | 062 | 062 | 062 | 011 | 011 | 011 | 011 | 011 | 011 | 011 | 011 | 011 | 099 | 099 | 099 | 099 | 099 | 099 | 099      | 099 | 010 | 010 | 010 |
|  |           | 072         | 081 | 082 | 091 | 092 | 012 | 022 | 031 | 032 | 041 | 052 | 061 | 062 | 061 | 022 | 071 | 081 | 082 | 081 | 092 | 091      | 082 | 011 | 012 | 022 |

|             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Compression               |   |   | 1 |   | 4 |   | 1 | 2 | 1 |   |   |   |   | 4 |   |   |   |   | 3 |   |   | 3 |   |   |   | 17 2.4 |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.5  |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Hemorrhage                |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0  |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50     |
| Ventricle, Dilatation     |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 5 1.6  |
| Nerve Trigeminal          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 2.0  |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Peripheral Nerve, Tibial  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Spinal Cord, Cervical     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Spinal Cord, Lumbar       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.5  |
| Spinal Cord, Thoracic     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 2500.StDose F | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>4<br>7<br>1      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>6<br>4<br>1      | 0<br>6<br>5<br>9      | 0<br>7<br>2<br>5      | 0<br>5<br>6<br>9      | 0<br>6<br>7<br>3      | 0<br>5<br>4<br>0      | 0<br>4<br>9<br>7      | 0<br>5<br>4<br>3      | 0<br>7<br>2<br>7      | 0<br>5<br>8<br>3      | 0<br>7<br>2<br>8      | 0<br>6<br>8<br>7      | 0<br>6<br>8<br>1      | 0<br>6<br>1<br>6      | 0<br>6<br>9<br>7      | 0<br>7<br>2<br>4      | 0<br>7<br>2<br>8      |                       | 0<br>5<br>2<br>1      | 0<br>5<br>8<br>7      | 0<br>7<br>2<br>8      | 0<br>7<br>2<br>7      |
| ANIMAL ID  | 0<br>6<br>2<br>7<br>2 | 0<br>6<br>2<br>8<br>1 | 0<br>6<br>2<br>8<br>2 | 0<br>6<br>2<br>9<br>1 | 0<br>6<br>2<br>9<br>2 | 0<br>8<br>1<br>2<br>2 | 0<br>8<br>1<br>2<br>2 | 0<br>8<br>1<br>3<br>2 | 0<br>8<br>1<br>3<br>2 | 0<br>8<br>1<br>4<br>1 | 0<br>8<br>1<br>4<br>2 | 0<br>8<br>1<br>5<br>1 | 0<br>8<br>1<br>5<br>2 | 0<br>8<br>1<br>6<br>1 | 0<br>8<br>1<br>6<br>2 | 0<br>9<br>9<br>6<br>1 | 0<br>9<br>9<br>6<br>2 | 0<br>9<br>9<br>7<br>1 | 0<br>9<br>9<br>8<br>2 | 0<br>9<br>9<br>8<br>1 | 0<br>9<br>9<br>8<br>2 | 1<br>0<br>0<br>0<br>1 | 1<br>0<br>0<br>0<br>2 | 1<br>0<br>0<br>2<br>1 | 1<br>0<br>0<br>2<br>2 |

**RESPIRATORY SYSTEM**

|   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |               |
|---|---|---|--|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---------------|
| Lung  | + | + |  | + | + |  | + | + | + | + | + | + |   | + | + | + | + |   |  | + | + | + | <b>39</b>     |
| Fibrosis  |   |   |  |   |   |  |   |   |   |   |   | 3 |   |   |   |   |   |   |  |   |   |   | <b>1 3.0</b>  |
| Hemorrhage  |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>2 3.0</b>  |
| Infiltration Cellular, Histiocyte                     |   | 2 |  | 3 |   |  |   |   |   |   |   | 4 |   |   |   | 3 | 2 |   |  |   | 1 | 1 | <b>10 2.3</b> |
| Inflammation, Suppurative                             |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>1 4.0</b>  |
| Inflammation, Chronic                                 |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>1 1.0</b>  |
| Metaplasia, Osseous                                   |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>2 1.0</b>  |
| Alveolar Epithelium, Hyperplasia                      |   |   |  |   |   |  |   |   |   |   |   | 3 |   |   |   |   |   |   |  |   |   |   | <b>1 3.0</b>  |
| Nose  | + |   |  | + | + |  | + | + | + | + | + |   | + |   | + | + | + | + |  |   | + | + | <b>32</b>     |
| Foreign Body  |   |   |  |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>1</b>      |
| Inflammation, Suppurative                             |   |   |  |   |   |  |   | 2 |   |   |   |   |   |   |   |   |   |   |  |   |   |   | <b>2 2.5</b>  |
| Inflammation, Chronic Active                          |   |   |  |   |   |  |   |   |   |   |   |   | 4 |   |   |   |   |   |  |   |   |   | <b>1 4.0</b>  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |  |   |   |  |   | 1 |   |   | 2 |   |   |   | 4 |   |   |   |  |   |   |   | <b>4 2.0</b>  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |  |   |   |  |   |   |   | 1 |   |   |   |   |   |   |   |   |  |   |   |   | <b>1 1.0</b>  |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |  |   |   |  |   | 2 |   |   | 2 |   |   |   |   |   |   |   |  |   |   |   | <b>3 2.0</b>  |
| Trachea   | + |   |  | + | + |  | + | + | + | + | + |   | + |   | + | + | + | + |  |   | + | + | <b>32</b>     |

**SPECIAL SENSES SYSTEM**

|                         |  |  |  |  |  |  |   |              |
|-------------------------|--|--|--|--|--|--|---|--------------|
| Eye                     |  |  |  |  |  |  | + | <b>1</b>     |
| Cataract                |  |  |  |  |  |  | 4 | <b>1 4.0</b> |
| Anterior Chamber, Edema |  |  |  |  |  |  | 4 | <b>1 4.0</b> |
| Retina, Degeneration    |  |  |  |  |  |  | 4 | <b>1 4.0</b> |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|                              |                    | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |   |   |   |  |
|------------------------------|--------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|---|--|
|                              |                    | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |   |   |   |   |  |
|                              |                    | 4           | 7 | 7 | 6 | 6 | 7 | 5 | 6 | 5 | 4 | 5 | 7 | 5 | 7 | 6 | 6 | 6 | 6 | 7 | 7 |          | 5 | 5 | 7 | 7 | 7 |  |
| <b>SPRAGUE DAWLEY (NCTR)</b> | <b>RATS FEMALE</b> | 7           | 2 | 2 | 4 | 5 | 2 | 6 | 7 | 4 | 9 | 4 | 2 | 8 | 2 | 8 | 8 | 1 | 9 | 2 | 2 | 8        | 2 | 8 | 2 | 2 |   |  |
|                              |                    | 1           | 8 | 9 | 1 | 9 | 5 | 9 | 3 | 0 | 7 | 3 | 7 | 3 | 8 | 7 | 1 | 6 | 7 | 4 | 8 | 1        | 7 | 8 | 2 | 7 |   |  |
|                              |                    | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 1 | 1 | 1 | 1 |   |  |
| <b>F1 2500.StDose F</b>      | ANIMAL ID          | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9        | 9 | 0 | 0 | 0 | 0 |  |
|                              |                    | 2           | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 9 | 9 | 9 | 9        | 0 | 0 | 0 | 0 |   |  |
|                              |                    | 7           | 8 | 8 | 9 | 9 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 8 | 8 | 8        | 0 | 0 | 2 | 2 |   |  |
|                              |                    | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2        | 1 | 2 | 1 | 2 |   |  |

**URINARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|--|--|
| Kidney                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50  |     |  |  |
| Casts Protein                            |   |   |   | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    | 5   | 1.4 |  |  |
| Infarct                                  |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |  |  |
| Infiltration Cellular, Polymorphonuclear |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 1.0 |  |  |
| Mineralization                           |   | 2 |   | 2 |   |   |   |   | 1 | 2 | 2 |   | 2 |   | 1 | 1 | 2 | 1 | 1 |   |   | 3 |   | 1 |   | 23 | 1.7 |     |  |  |
| Nephropathy                              | 1 | 3 | 2 |   | 1 |   |   | 2 | 3 | 4 |   | 4 |   | 4 | 1 | 1 | 1 |   | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 33 | 1.9 |     |  |  |
| Cortex, Cyst                             |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   | X |   | X |   |   |   |   |   |   | 8  |     |     |  |  |
| Renal Tubule, Cyst                       |   | X |   |   |   |   |   | X |   | X | X |   | X |   |   | X |   | X |   | X |   |   |   |   |   | 16 |     |     |  |  |
| Transitional Epithelium, Hyperplasia     |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1.0 |     |  |  |
| Urinary Bladder                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |  |  |
| Congestion                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | ANIMAL ID | females<br>(cont...) |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------------------|-------|-------|-------|-------|
|  | 0727        | 0653  | 0673  | 0678  | 0676  | 0677  | 0677  | 0661  | 0671  | 0673  | 0658  | 0678  | 0643  | 0674  | 0677  | 0666  | 0666  | 0657  | 0666  | 0675  |           |                      | 0676  | 0649  | 0676  | 0684  |
|  | 02091       | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091 | 02091     | 02091                | 02091 | 02091 | 02091 | 02091 |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                               | + | + |   | + |   |   | + | + | + | + | + |   |   | + | + | + | + | + | + |   |   | + |   | + | + | + |
| Intestine Large, Colon                  | + | + |   | + | + |   | + | + | + | + | + |   |   | + | + | + | + | + | + |   |   | + |   | + | + | + |
| Intestine Small, Ileum                  | + | + |   | + |   |   | + | + | + | + | + |   |   | + | + | + | + | + | + |   |   | + |   | + | + | + |
| Liver                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                             |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Basophilic Focus                        | X | X |   | X | X |   | X | X |   |   | X | X | X | X |   |   | X | X |   | X |   |   | X | X | X |   |
| Clear Cell Focus                        |   | X |   | X |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Degeneration, Cystic                    |   |   | 1 |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fatty Change                            |   | 3 |   | 2 |   | 3 |   |   |   |   |   | 2 | 2 |   |   |   | 3 |   |   |   |   | 4 | 2 | 3 |   |   |
| Hematopoietic Cell Proliferation        |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule              |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Infiltration Cellular, Mononuclear Cell | 2 | 1 |   | 2 |   | 1 | 2 | 1 | 1 |   |   |   | 1 | 1 | 1 | 1 |   | 1 |   | 1 | 2 | 1 | 1 | 2 | 1 |   |
| Inflammation, Chronic Active            |   |   |   | 2 |   |   |   |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus                        |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Tension Lipidosis                       | 4 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 3 |
| Vacuolization Cytoplasmic               |   |   | 2 |   | 2 |   | 2 |   | 2 |   |   |   |   | 2 |   | 2 |   | 2 |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                  | 3 |   | 1 | 3 |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   | 1 |   | 2 | 3 |   |   |   |   | 1 |
| Biliary Tract, Fibrosis                 | 1 |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Hepatocyte, Necrosis                    |   |   |   |   | 3 |   |   |   |   |   |   | 2 |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Oval Cell, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mesentery                               |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   |   |   |   |   |   |
| Fat, Necrosis                           |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 4 |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | ANIMAL ID      | females<br>(cont...) |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|----------------|----------------|----------------|
|  | 07<br>27       | 06<br>53       | 06<br>73       | 07<br>28       | 06<br>66       | 07<br>77       | 07<br>77       | 06<br>61       | 07<br>75       | 03<br>58       | 05<br>08       | 04<br>83       | 07<br>64       | 07<br>73       | 06<br>62       | 06<br>65       | 05<br>59       | 07<br>71       | 06<br>62       | 06<br>69       |                |                      | 05<br>77       | 06<br>62       | 07<br>75       |
|  | 02<br>00<br>91 | 02<br>00<br>92 | 01<br>01<br>01 | 02<br>01<br>02 | 02<br>01<br>01 | 02<br>01<br>02 | 02<br>01<br>02 | 02<br>01<br>02 | 02<br>01<br>02 | 02<br>01<br>02 | 04<br>04<br>05 | 04<br>04<br>05 | 04<br>04<br>06 | 04<br>04<br>07 | 04<br>04<br>08 | 04<br>04<br>08 | 04<br>04<br>09 | 04<br>04<br>09 | 04<br>04<br>09 | 06<br>06<br>06 | 06<br>06<br>06 | 06<br>06<br>06       | 06<br>06<br>06 | 06<br>06<br>06 | 06<br>06<br>06 |

|                                   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|-----------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Oral Mucosa                       |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + |
| Pancreas                          | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Basophilic Focus                  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Infiltration Cellular, Lymphocyte | 2 2 2 2 2 1 2 1 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Inflammation, Chronic Active      | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Lipomatosis                       | 3 4 3 3 3 4                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Pigmentation                      | 1 1 2 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Acinus, Degeneration              | 3 4 3 4 4 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 4 4 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Stomach, Forestomach              | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Cyst Epithelial Inclusion         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Edema                             | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Necrosis                          | 2   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Epithelium, Hyperplasia           |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Stomach, Glandular                | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |

**CARDIOVASCULAR SYSTEM**

|                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel   | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Heart          | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardiomyopathy | 3 1 1 1 1 2 3 1 1 2 2 1 2 2 3 1 2 2 2 2 2 2 2 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**ENDOCRINE SYSTEM**

|                |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Adrenal Cortex | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angiectasis    | 2 2 2 2 3 2                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy        |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST | 0727  | 0653  | 0673  | 0678  | 0677  | 0677  | 0661  | 0677  | 0634  | 0654  | 0674  | 0677  | 0666  | 0666  | 0655  | 0677  | 0666  | 0666  | 0677  | 0655  | 0677  | 0666  | 0644  | females<br>(cont...) |
|  | ANIMAL ID   | 02091 | 02090 | 02001 | 02011 | 02011 | 02021 | 02022 | 02033 | 02033 | 02044 | 02044 | 02044 | 02044 | 02044 | 02044 | 02044 | 02044 | 02044 | 02066 | 02066 | 02066 | 02066 | 02066 |                      |

Tissue NOS

GENITAL SYSTEM

|                                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Clitoral Gland                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperkeratosis                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Suppurative        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Duct, Dilatation                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ovary                            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angiectasis                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cyst                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyperplasia, Sertoliform         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bilateral, Follicle, Cyst        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Follicle, Cyst                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Granulosa Cell, Hyperplasia      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oviduct                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Uterus                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adenomyosis                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atrophy                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dilatation                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metaplasia, Squamous             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrial Glands, Hyperplasia  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Cyst                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Endometrium, Hyperplasia, Cystic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |  | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | females<br>(cont...) |    |
|--|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------------|----|
| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F |  | 07          | 06 | 06 | 07 | 06 | 07 | 07 | 06 | 07 | 03 | 05 | 04 | 07 | 07 | 06 | 06 | 05 | 07 | 06 | 06 | 07 | 05 | 07 | 06 |                      | 04 |
| ANIMAL ID  |  | 27          | 53 | 73 | 28 | 66 | 27 | 27 | 51 | 77 | 44 | 33 | 44 | 33 | 99 | 66 | 62 | 55 | 00 | 22 | 77 | 22 | 66 | 27 | 75 |                      | 88 |
|  |  | 00          | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00                   |    |
|  |  | 22          | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 66 | 66 | 66 | 66                   |    |
|  |  | 00          | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 11 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 44 | 44 | 44 | 44 | 44                   |    |
|  |  | 99          | 99 | 00 | 01 | 01 | 01 | 02 | 03 | 03 | 55 | 55 | 66 | 77 | 88 | 88 | 99 | 99 | 11 | 11 | 11 | 22 | 22 | 22 | 33 | 11                   |    |
|  |  | 11          | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11                   |    |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vagina  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 3 | 4 |   |   |   |   | 4 | 3 |   |
| Epithelium, Hyperplasia   |   |   |   |   |   |   |   |   |   | 4 | 3 |   |   |   | 4 |   |   |   |   |   |   |   |   | 3 |   |
| Epithelium, Mucification  | 4 | 3 | 2 | 3 | 4 | 4 | 4 | 3 | 4 |   |   | 4 | 4 | 2 |   | 3 | 3 | 3 |   | 3 | 2 |   |   | 4 | 4 |
| Lumen, Dilatation   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |

HEMATOPOIETIC SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Hypocellularity                              |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |
| Lymph Node                                   | + |   | + |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   | + | + |   |   |   |   |   |
| Axillary, Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Hyperplasia, Lymphoid              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Infiltration Cellular, Plasma Cell |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Degeneration, Cystic                 | 4 |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hyperplasia, Lymphoid                |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   |
| Lumbar, Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   |   |
| Renal, Degeneration, Cystic                  | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Pigmentation                          | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mandibular                       | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   | + |   |   |   |   |   |
| Degeneration, Cystic                         | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia, Lymphoid                        | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Infiltration Cellular, Plasma Cell           | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |
| Lymph Node, Mesenteric                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females<br>(cont...) |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|
|  |             | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 3 | 5 | 4 | 7 | 7 | 6 | 6 | 5 | 7 | 6 | 6 | 7 | 5 | 7 | 6 |           |                      | 4 |
|  |             | 2 | 5 | 7 | 2 | 6 | 2 | 2 | 5 | 0 | 8 | 8 | 6 | 0 | 2 | 1 | 5 | 5 | 0 | 2 | 7 | 2 | 6 | 2 | 7 | 9         |                      |   |
|  |             | 7 | 3 | 3 | 8 | 6 | 7 | 7 | 1 | 7 | 4 | 3 | 4 | 3 | 9 | 6 | 2 | 9 | 1 | 2 | 9 | 3 | 7 | 7 | 5 | 8         |                      |   |
|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                      |   |
|  |             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6         |                      |   |
|  |             | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4         |                      |   |
|  |             | 9 | 9 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 1 | 1 | 1 | 2 | 2         |                      |   |
|  |             | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1         |                      |   |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Spleen                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |  |  |
| Hematopoietic Cell Proliferation | 2 | 2 |   |   | 4 | 2 | 2 | 1 | 3 | 2 | 2 | 4 | 3 | 2 | 1 | 2 | 4 |   |   |   | 3 | 2 |   | 4 | 3 |   |  |  |
| Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Necrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |  |  |
| Pigmentation                     | 2 | 2 | 3 | 3 |   | 2 | 2 |   | 1 | 2 | 2 |   | 2 | 3 | 1 | 1 |   |   |   | 3 |   | 3 | 4 |   | 3 | 3 |  |  |
| Polyarteritis                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Thymus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |
| Atrophy                          | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 |   |   | 4 | 4 | 4 | 4 | 4 |   |  |  |
| Epithelial Cell, Hyperplasia     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |  |  |

INTEGUMENTARY SYSTEM

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Mammary Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |  |
| Atypical Focus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Hyperplasia, Lobular               | 3 | 2 | 4 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | 2 |   | 4 | 4 | 1 | 4 | 1 | 4 | 2 |   |   | 4 | 4 | 3 | 4 | 4 |  |  |
| Alveolus, Dilatation               |   |   |   |   |   |   |   |   |   | 2 | 2 |   |   |   | 2 |   | 1 |   |   |   |   |   |   |   |   |   |  |  |
| Duct, Dilatation                   |   |   | 2 |   |   | 2 |   |   |   | 2 | 2 |   |   |   | 3 |   |   |   | 2 |   |   |   | 3 |   |   |   |  |  |
| Duct, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Skin                               |   |   |   |   | + |   |   | + |   |   |   |   |   |   | + |   |   |   | + |   |   |   |   |   |   |   |  |  |
| Epithelium, Foot, Hyperplasia      |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 |   |  |  |
| Foot, Cyst Epithelial Inclusion    |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |
| Foot, Edema                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |  |  |
| Foot, Fibrosis                     |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 |   |  |  |
| Foot, Inflammation, Chronic Active |   |   |   |   | 4 |   |   | 4 |   |   |   |   |   |   | 4 |   |   |   | 4 |   |   |   |   |   | 4 |   |  |  |
| Foot, Necrosis                     |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |  |  |
| Foot, Ulcer                        |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   | 4 |   |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked







Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|  |                         | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |   |  |
|--|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|--|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE</b> | <b>F1 25000StDose F</b> | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |   |  |
|  |                         | 7           | 4 | 5 | 7 | 5 | 4 | 4 | 4 | 7 | 4 | 3 | 4 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 6 | 7               | 7 |  |
|  |                         | 2           | 4 | 9 | 2 | 9 | 3 | 4 | 6 | 2 | 7 | 9 | 8 | 2 | 3 | 0 | 2 | 6 | 1 | 0 | 5 | 2               |   |  |
|  |                         | 7           | 7 | 4 | 8 | 8 | 5 | 6 | 3 | 7 | 0 | 4 | 6 | 7 | 5 | 0 | 6 | 5 | 4 | 3 | 7 | 7               |   |  |
|  |                         | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1               |   |  |
|  |                         | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0               |   |  |
|  |                         | 4           | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1               |   |  |
|  |                         | 3           | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2               |   |  |
|  |                         | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2               |   |  |
|  |                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>* TOTALS</b> |   |  |

ALIMENTARY SYSTEM

|   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|---|--|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Esophagus                               |  |  | + | + |   | + | + | + | + |   | + | + | + |   | + | + |   | + | + | + | + |   |           |
|   |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>33</b> |
| Intestine Large, Colon                  |  |  | + | + |   | + | A | + | + |   | + | + | + |   | + | + |   | + | + | + | + |   | <b>33</b> |
| Intestine Small, Ileum                  |  |  | + | + |   | + | + | + | + |   | + | + | + |   | + | + |   | + | + | + | + |   | <b>33</b> |
| Liver                                   |  |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | <b>46</b> |
| Angiectasis                             |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  |
| Basophilic Focus                        |  |  |   | X | X | X |   |   |   |   |   | X |   |   |   |   |   | X | X | X |   |   | <b>23</b> |
| Clear Cell Focus                        |  |  | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   | <b>9</b>  |
| Degeneration, Cystic                    |  |  |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   | <b>7</b>  |
| Eosinophilic Focus                      |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | <b>1</b>  |
| Fatty Change                            |  |  |   | 3 |   |   |   |   | 2 |   |   |   |   | 2 |   | 2 |   | 2 |   |   | 2 |   | <b>15</b> |
| Hematopoietic Cell Proliferation        |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | <b>2</b>  |
| Hepatodiaphragmatic Nodule              |  |  |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   | <b>4</b>  |
| Infiltration Cellular, Mononuclear Cell |  |  | 1 |   |   | 1 | 1 |   | 1 | 2 |   |   | 1 | 1 | 2 | 2 | 1 |   |   | 1 | 1 | 1 | <b>31</b> |
| Inflammation, Chronic Active            |  |  |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  |
| Mixed Cell Focus                        |  |  |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>4</b>  |
| Tension Lipidosis                       |  |  |   |   |   |   |   |   |   |   | 2 |   | 4 |   | 4 | 3 |   | 3 |   |   |   |   | <b>10</b> |
| Vacuolization Cytoplasmic               |  |  |   |   |   |   |   |   |   |   |   |   |   | 2 | 4 |   |   |   |   | 2 |   |   | <b>12</b> |
| Bile Duct, Hyperplasia                  |  |  | 1 |   |   |   |   |   |   |   | 2 |   | 1 |   | 2 | 2 | 1 |   | 1 |   |   | 2 | <b>17</b> |
| Biliary Tract, Fibrosis                 |  |  |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 | 1 |   |   |   |   |   | 2 | <b>8</b>  |
| Hepatocyte, Necrosis                    |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  |
| Oval Cell, Hyperplasia                  |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | <b>1</b>  |
| Mesentery                               |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  |
| Fat, Necrosis                           |  |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0727        | 0447  | 0594  | 0728  | 0598  | 0435  | 0446  | 0463  | 0727  | 0470  | 0346  | 0777  | 0635  | 0776  | 0654  | 0563  | 0667  | 0657  | 0727  | 0727  |          |
| ANIMAL ID  | 06432       | 06444 | 06444 | 06444 | 06455 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 | 06466 |          |
|  | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |          |
|  | 6           | 6     | 6     | 6     | 6     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     | 8     |          |
|  | 4           | 4     | 4     | 4     | 4     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 3     | 3     | 1     | 1     | 1     | 1     |          |
|  | 3           | 4     | 4     | 4     | 5     | 5     | 6     | 6     | 7     | 7     | 8     | 8     | 9     | 9     | 0     | 0     | 0     | 1     | 1     | 2     |          |
|  | 2           | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 1     | 2     | 2     |          |

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----|
| Oral Mucosa                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |     |     |
| Pancreas                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |     |     |
| Basophilic Focus                  |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |     |     |
| Infiltration Cellular, Lymphocyte | 2 |   | 2 | 1 |   |   | 1 | 1 | 2 | 2 |   | 1 | 2 | 2 |   | 2 | 3 | 2 | 1 | 1 | 3 |     |     |
| Inflammation, Chronic Active      | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2.0 |     |
| Lipomatosis                       |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 6 | 3.5 |     |
| Pigmentation                      |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 8 | 1.3 |     |
| Acinus, Degeneration              | 3 | 1 | 2 | 1 |   |   | 3 | 2 | 3 | 3 |   | 1 | 4 | 2 |   | 2 | 4 | 2 | 2 | 1 | 3 | 34  | 2.4 |
| Stomach, Forestomach              |   | + | + |   | + | + | + | + |   | + | + | + |   | + | + |   | + | + | + | + |   | 34  |     |
| Cyst Epithelial Inclusion         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2   |     |
| Edema                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   | 2.0 |
| Necrosis                          |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   | 1   | 4.0 |
| Epithelium, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   | 2.0 |
| Stomach, Glandular                |   | + | + |   | + | A | + | + |   | + | + | + |   | + | + |   | + | + | + | + |   | 32  |     |

CARDIOVASCULAR SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Blood Vessel   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 46 |     |
| Heart          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   | 46 |     |
| Cardiomyopathy | 2 | 1 | 1 | 2 |   |   |   |   |   | 3 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 |   | 1 | 1 | 35 | 1.7 |

ENDOCRINE SYSTEM

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |    |     |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|----|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | 46 |     |
| Angiectasis    |   |   |   | 2 |   |   |   |   |   | 2 | 4 |   |   |   |   |   | 2 |   |   |   |  | 10 | 2.3 |
| Atrophy        |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |  | 1  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0727        | 0447  | 0597  | 0728  | 0598  | 0448  | 0448  | 0448  | 0778  | 0438  | 0478  | 0668  | 0778  | 0778  | 0668  | 0558  | 0668  | 0668  | 0778  | 0778  |          |
| ANIMAL ID  | 06432       | 06441 | 06444 | 06455 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 | 06822 |          |
| Cyst   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 1        |
| Degeneration, Cystic                                     | 2           |       | 2     | 3     |       |       |       |       | 2     |       |       | 4     | 1     | 4     | 2     | 3     | 2     |       | 2     |       | 25 2.5   |
| Hyperplasia  |             |       |       | 2     |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       | 1     | 7 1.7    |
| Hypertrophy  | 2           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4 2.5    |
| Metaplasia, Osseous                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 3.0    |
| Vacuolization Cytoplasmic                                | 3           | 2     |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 6 2.3    |
| Adrenal Medulla  | +           | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 45       |
| Hyperplasia  |             |       |       | 2     |       |       |       |       |       |       |       | 1     |       | 3     |       |       |       |       |       |       | 5 1.8    |
| Islets, Pancreatic                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 46       |
| Hyperplasia  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2 2.0    |
| Parathyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 46       |
| Hyperplasia  |             |       |       | 2     |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       | 1     |       | 7 1.3    |
| Pituitary Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 46       |
| Angiectasis  |             |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       | 3     |       | 3     | 11 3.2   |
| Fibrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |       |       |       |       |       | 1 3.0    |
| Pars Distalis, Cyst                                      |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4        |
| Pars Distalis, Hyperplasia                               |             | 3     |       |       |       |       |       | 4     | 3     | 4     | 4     | 3     |       |       |       | 2     | 3     | 3     |       | 3     | 21 3.2   |
| Pars Distalis, Vacuolization Cytoplasmic                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |       | 1 4.0    |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 46       |
| Ultimobranchial Cyst                                     |             | X     |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |
| C-cell, Hyperplasia                                      | 1           |       | 1     | 1     | 1     |       |       |       |       | 2     | 2     | 2     | 1     |       |       |       | 1     |       | 2     |       | 24 1.6   |
| Follicular Cell, Cyst                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Follicular Cell, Hyperplasia                             |             | 2     |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       | 4 2.3    |

GENERAL BODY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
|  | 07          | 04 | 05 | 07 | 05 | 04 | 04 | 04 | 07 | 04 | 03 | 04 | 07 | 06 | 07 | 07 | 06 | 05 | 06 | 06 |          |
| ANIMAL ID  | 06          | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08       |
|  | 44          | 44 | 44 | 44 | 44 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 33 | 33 | 11 | 11 | 11 | 11 | 11 | 11       |
|  | 33          | 44 | 44 | 44 | 55 | 66 | 66 | 77 | 77 | 88 | 88 | 99 | 00 | 00 | 00 | 11 | 11 | 11 | 11 | 22 | 22       |
|  | 22          | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22 | 11 | 22       |

Tissue NOS + 1

**GENITAL SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|
| Clitoral Gland                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7 |    |     |     |     |
| Hyperkeratosis                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.0 |     |
| Inflammation, Suppurative        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 5   | 3.4 |     |
| Duct, Dilatation                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 6   | 3.8 |     |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |     |     |
| Angiectasis                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |     |
| Atrophy                          | 3 | 2 | 4 | 2 | 4 |   | 4 | 4 | 3 | 4 | 2 | 2 | 2 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |   | 44 | 2.7 |     |     |
| Cyst                             |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X |   |   |   |   |   |   |    | 6   |     |     |
| Hyperplasia, Sertoliform         |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   | 1 |    | 6   | 1.8 |     |
| Bilateral, Follicle, Cyst        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   |     |     |
| Follicle, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |    | 4   |     |     |
| Granulosa Cell, Hyperplasia      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.5 |     |
| Oviduct                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |     |     |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |     |     |     |
| Adenomyosis                      |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |     |
| Atrophy                          |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |    | 9   | 3.1 |     |
| Dilatation                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |    | 1   | 2.0 |     |
| Metaplasia, Squamous             |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3   | 1.0 |     |
| Endometrial Glands, Hyperplasia  |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |    | 2   | 2.5 |     |
| Endometrium, Cyst                |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |    | 2   |     |     |
| Endometrium, Hyperplasia         | 2 | 2 |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 2  | 2   | 10  | 2.0 |
| Endometrium, Hyperplasia, Cystic |   |   |   | 4 |   | 1 | 3 | 2 | 3 |   | 2 | 3 |   | 2 | 3 | 2 |   |   | 3 |   |   |   |    | 24  | 2.3 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked



Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID |                 |   |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------------|---|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |                 | 0 |
|  | 7           | 4 | 5 | 7 | 5 | 4 | 4 | 4 | 7 | 4 | 3 | 4 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 6 | 7         |                 |   |
|  | 2           | 4 | 9 | 2 | 9 | 3 | 4 | 6 | 2 | 7 | 9 | 8 | 2 | 3 | 0 | 2 | 6 | 1 | 0 | 5 | 2         |                 |   |
|  | 7           | 7 | 4 | 8 | 8 | 5 | 6 | 3 | 7 | 0 | 4 | 6 | 7 | 5 | 0 | 6 | 5 | 4 | 3 | 7 | 7         |                 |   |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1         |                 |   |
|  | 6           | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |                 |   |
|  | 4           | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1         |                 |   |
|  | 3           | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2         |                 |   |
|  | 2           | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2         |                 |   |
|  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>* TOTALS</b> |   |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |               |              |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|---------------|--------------|
| Vagina  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | <b>46</b> |               |              |
| Atrophy   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |  |           |               | <b>2 4.0</b> |
| Infiltration Cellular, Polymorphonuclear Epithelium, Degeneration |   |   | 2 | 4 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |               | <b>8 3.0</b> |
| Epithelium, Hyperplasia   |   |   |   | 3 | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |               | <b>3 3.0</b> |
| Epithelium, Mucification  |   |   |   |   | 3 |   |   | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |  |           |               | <b>7 3.3</b> |
| Lumen, Dilatation   | 3 | 4 |   | 1 |   |   | 2 | 4 | 3 |   |   | 3 | 4 |   | 4 | 4 | 4 | 4 | 4 | 2 | 3 |  |           | <b>34 3.3</b> |              |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |               | <b>1 4.0</b> |

**HEMATOPOIETIC SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           |              |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|-----------|-----------|--------------|
| Bone Marrow Hypocellularity                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  | <b>45</b> |           |              |
|  |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>3 3.7</b> |
| Lymph Node                                   | + |   | + |   | + |   | + |   |   |   |   |   |   | + |   |   | + |   |   |   |   |  |           | <b>11</b> |              |
| Axillary, Degeneration, Cystic               | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>1 2.0</b> |
| Axillary, Hyperplasia, Lymphoid              | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>1 2.0</b> |
| Axillary, Infiltration Cellular, Plasma Cell | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>1 4.0</b> |
| Lumbar, Degeneration, Cystic                 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |  |           |           | <b>3 3.3</b> |
| Lumbar, Hyperplasia, Lymphoid                |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 2 |   |   | 3 |   |   |   |   |  |           |           | <b>6 3.2</b> |
| Lumbar, Infiltration Cellular, Plasma Cell   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 3 |   |   | 3 |   |   |   |   |  |           |           | <b>5 3.6</b> |
| Renal, Degeneration, Cystic                  |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>2 4.0</b> |
| Renal, Pigmentation                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>1 3.0</b> |
| Lymph Node, Mandibular Degeneration, Cystic  |   |   |   |   |   |   | + |   |   | + |   |   |   |   |   |   |   |   |   |   |   |  |           | <b>5</b>  |              |
| Hyperplasia, Lymphoid                        |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>3 3.3</b> |
| Infiltration Cellular, Plasma Cell           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           |           | <b>2 3.5</b> |
| Lymph Node, Mesenteric                       |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |           | <b>2</b>  |              |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |                 |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|  | 0727        | 0447 | 0549 | 0728 | 0578 | 0443 | 0446 | 0446 | 0727 | 0477 | 0349 | 0478 | 0663 | 0770 | 0776 | 0665 | 0554 | 0663 | 0667 | 0777 |           |                 |
|  | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 6432      |                 |
|  | 6           | 6    | 6    | 6    | 6    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 0    | 0    | 1    | 1    | 1    | 4432      |                 |
|  | 4           | 4    | 4    | 4    | 4    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 3    | 1    | 1    | 1    | 1    | 3412      |                 |
|  | 2           | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2    | 1    | 2         |                 |
|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | <b>* TOTALS</b> |

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Spleen                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |    |     |
| Fibrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 4.0 |
| Hematopoietic Cell Proliferation |   | 3 | 3 | 2 | 2 |   |   | 1 | 2 |   |   | 3 | 1 | 2 |   |   | 2 | 1 | 4 | 2 |    | 32 | 2.4 |
| Hyperplasia, Lymphoid            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |    | 1  | 2.0 |
| Necrosis                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 4.0 |
| Pigmentation                     | 1 | 2 | 2 | 1 | 4 |   | 4 | 1 | 2 | 3 | 2 |   |   | 2 | 3 | 1 |   |   |   | 1 |    | 32 | 2.2 |
| Polyarteritis                    |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |    | 1  | 1.0 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Thymus                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |    |     |
| Atrophy                      | 4 | 3 | 4 | 4 | 4 |   | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |    | 42 | 3.9 |
| Epithelial Cell, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 4.0 |

INTEGUMENTARY SYSTEM

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Mammary Gland        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |    |     |
| Atypical Focus       |   |   | 1 |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |    | 5  | 1.6 |
| Hyperplasia, Lobular | 4 | 4 | 2 | 4 | 2 |   |   | 2 | 3 |   |   | 2 |   |   | 4 | 2 | 4 | 4 | 3 | 3 |    | 38 | 3.1 |
| Alveolus, Dilatation |   |   |   | 2 | 2 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |    | 7  | 1.9 |
| Duct, Dilatation     |   |   | 3 |   | 2 |   |   | 2 | 3 |   |   |   |   |   |   |   |   |   |   |   |    | 11 | 2.4 |
| Duct, Hyperplasia    |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 3.0 |

|                                    |   |   |   |   |  |  |  |   |  |  |  |   |  |   |  |  |  |  |  |   |    |    |     |
|------------------------------------|---|---|---|---|--|--|--|---|--|--|--|---|--|---|--|--|--|--|--|---|----|----|-----|
| Skin                               | + | + | + | + |  |  |  | + |  |  |  | + |  | + |  |  |  |  |  | + | 12 |    |     |
| Epithelium, Foot, Hyperplasia      | 4 | 4 | 4 | 4 |  |  |  | 4 |  |  |  |   |  |   |  |  |  |  |  | 4 |    | 10 | 4.0 |
| Foot, Cyst Epithelial Inclusion    |   |   |   |   |  |  |  |   |  |  |  |   |  |   |  |  |  |  |  |   |    | 1  |     |
| Foot, Edema                        |   |   | 4 | 4 |  |  |  |   |  |  |  |   |  | 4 |  |  |  |  |  | 4 |    | 6  | 4.0 |
| Foot, Fibrosis                     | 4 | 4 | 4 | 4 |  |  |  | 4 |  |  |  |   |  | 4 |  |  |  |  |  | 4 |    | 11 | 4.0 |
| Foot, Inflammation, Chronic Active | 4 | 4 | 4 | 4 |  |  |  | 4 |  |  |  |   |  | 4 |  |  |  |  |  | 4 |    | 11 | 4.0 |
| Foot, Necrosis                     | 4 |   | 4 |   |  |  |  | 4 |  |  |  |   |  |   |  |  |  |  |  | 4 |    | 6  | 4.0 |
| Foot, Ulcer                        | 4 | 4 | 4 | 4 |  |  |  | 4 |  |  |  |   |  |   |  |  |  |  |  | 4 |    | 9  | 4.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04  
 Test Type: CHRONIC  
 Route: GAVAGE  
 Species/Strain: RATS/Sprague Dawley (NCTR)

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
 Bisphenol A  
 CAS Number: 80-05-7

Date Report Requested: 08/16/2017  
 Time Report Requested: 10:21:03  
 First Dose M/F: 09/25/12 / 09/25/12  
 Lab: NCTR

|  |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)</b><br><b>RATS FEMALE</b> | DAY ON TEST | 7 | 4 | 5 | 7 | 5 | 4 | 4 | 4 | 7 | 4 | 3 | 4 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 6 | 7 |
|  |             | 2 | 4 | 9 | 2 | 9 | 3 | 4 | 6 | 2 | 7 | 9 | 8 | 2 | 3 | 0 | 2 | 6 | 1 | 0 | 5 | 2 |
|  |             | 7 | 7 | 4 | 8 | 8 | 5 | 6 | 3 | 7 | 0 | 4 | 6 | 7 | 5 | 0 | 6 | 5 | 4 | 3 | 7 | 7 |
| <b>F1 25000StDose F</b>                            | ANIMAL ID   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |             | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |             | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |             | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 |
|  |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>                                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**MUSCULOSKELETAL SYSTEM**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Bone, Femur     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46    |
| Osteopetrosis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   | 2     |

**NERVOUS SYSTEM**

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Brain, Brain Stem         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46     |
| Compression               |   |   | 1 | 2 | 3 |   | 4 |   |   |   |   | 3 |   |   |   |   |   |   |   | 3 |   | 14 2.6 |
| Hemorrhage                |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0  |
| Brain, Cerebellum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46     |
| Brain, Cerebrum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46     |
| Hemorrhage                |   |   |   |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 2 1.5  |
| Ventricle, Dilatation     |   |   |   |   | 2 |   | 2 |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 6 1.5  |
| Nerve Trigeminal          |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   |   | + |   |   | 4      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   | 2 1.0  |
| Peripheral Nerve, Sciatic |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   |   | + |   |   | 4      |
| Peripheral Nerve, Tibial  |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   |   | + |   |   | 4      |
| Spinal Cord, Cervical     |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   |   | + |   |   | 4      |
| Spinal Cord, Lumbar       |   |   |   |   |   |   |   |   | + | + | + |   |   |   |   |   |   |   | + |   |   | 4      |
| Axon, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 1.0  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically M .. Missing tissue  
 X .. Lesion present A .. Autolysis precludes evaluation  
 I .. Insufficient tissue BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

|   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>SPRAGUE DAWLEY (NCTR)<br/>RATS FEMALE<br/>F1 25000StDose F</b> | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|   | ANIMAL ID   | 7 | 4 | 5 | 7 | 5 | 4 | 4 | 4 | 7 | 4 | 3 | 4 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 6 | 7 |
|   |             | 2 | 4 | 9 | 2 | 9 | 3 | 4 | 6 | 2 | 7 | 9 | 8 | 2 | 3 | 0 | 2 | 6 | 1 | 0 | 5 | 2 |
|   |             | 7 | 7 | 4 | 8 | 8 | 5 | 6 | 3 | 7 | 0 | 4 | 6 | 7 | 5 | 0 | 6 | 5 | 4 | 3 | 7 | 7 |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   |             | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|   |             | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 |
|   |             | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <b>* TOTALS</b>   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Spinal Cord, Thoracic

+ + +

+

4

**RESPIRATORY SYSTEM**

|   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |              |
|---|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Lung  | + | + | + |  | + | + | + | + | + | + | + | + | + | + |   | + | + | + | + |   | <b>37</b>    |
| Infiltration Cellular, Histiocyte                     | 3 |   |   |  |   |   |   |   |   | 4 |   |   |   |   |   |   |   | 3 |   |   | <b>7 2.0</b> |
| Inflammation, Suppurative                             |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b> |
| Inflammation, Chronic                                 |   |   |   |  |   |   |   |   | 1 | 4 |   |   |   |   |   |   |   |   |   |   | <b>2 2.5</b> |
| Alveolar Epithelium, Hyperplasia                      | 3 |   |   |  |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   | <b>3 2.3</b> |
| Nose  |   | + | + |  | + | + | + | + |   | + | + | + |   | + | + |   | + | + | + | + | <b>33</b>    |
| Autolysis   |   |   |   |  |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | <b>1 4.0</b> |
| Foreign Body  |   |   |   |  |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | <b>1</b>     |
| Hemorrhage  |   |   |   |  |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   | <b>1 4.0</b> |
| Inflammation, Suppurative                             |   |   |   |  |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | <b>1 1.0</b> |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3 1.3</b> |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b> |
| Respiratory Epithelium, Hyperplasia, Goblet Cell      |   |   |   |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1 2.0</b> |
| Trachea   |   | + | + |  | + | + | + | + |   | + | + | + |   | + | + |   | + | + | + | + | <b>33</b>    |

**SPECIAL SENSES SYSTEM**

|     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |
|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| Ear |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>1</b> |
|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|

**URINARY SYSTEM**

|        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>46</b> |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 10034 - 04

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/Sprague Dawley (NCTR)

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Bisphenol A

CAS Number: 80-05-7

Date Report Requested: 08/16/2017

Time Report Requested: 10:21:03

First Dose M/F: 09/25/12 / 09/25/12

Lab: NCTR

| SPRAGUE DAWLEY (NCTR)<br>RATS FEMALE<br>F1 25000StDose F | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |     |
|--|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|-----|
|  | 07          | 04 | 05 | 07 | 05 | 04 | 04 | 04 | 07 | 04 | 03 | 04 | 07 | 06 | 07 | 07 | 06 | 05 | 06 | 06 |          | 07 |     |
| ANIMAL ID  | 06          | 06 | 06 | 06 | 06 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 00 | 00 | 00 | 00 | 00       |    |     |
| Casts Protein  | 1           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          | 4  | 1.3 |
| Infarct  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          | 1  |     |
| Infiltration Cellular, Polymorphonuclear                 |             |    |    |    |    |    |    |    |    |    |    |    |    | 2  |    |    |    |    |    |    |          | 1  | 2.0 |
| Mineralization   | 1           | 1  |    | 1  |    |    | 1  | 2  |    | 2  | 1  | 2  |    | 2  |    |    |    |    | 1  |    | 1        | 23 | 1.5 |
| Nephropathy  |             | 4  | 1  | 2  | 3  |    |    |    |    | 3  | 1  |    | 1  | 2  | 4  | 1  | 2  | 4  | 3  | 1  | 1        | 30 | 2.1 |
| Polyarteritis  |             |    |    |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    |    |    |    |          | 1  | 2.0 |
| Polycystic Kidney  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          | 1  | 3.0 |
| Cortex, Cyst   |             |    |    |    |    |    |    | X  |    |    |    |    |    |    |    | X  |    |    |    |    |          | 5  |     |
| Renal Tubule, Cyst                                       |             | X  |    | X  |    |    |    |    |    | X  |    |    |    |    |    |    | X  | X  | X  |    |          | 11 |     |
| Transitional Epithelium, Hyperplasia                     | 1           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 1  |    |    |          | 8  | 2.0 |
| Urinary Bladder  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    | +  |    |    |    |    |          | 1  |     |
| Edema  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 3  |    |    |    |          | 1  | 3.0 |
| Hemorrhage   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          | 1  | 2.0 |

\*\*\* END OF REPORT \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked