

Experiment Number: 10472 - 01
Test Type: 90-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 08/05/2016
Time Report Requested: 10:34:45
First Dose M/F: 10/26/09 / 10/26/09
Lab: BNW

F2_HSD Rats

NTP Study Number: C10472
Lock Date: 06/08/2010
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: NONE

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS MALE CONTROL	93	93	93	93	93	93	93	93	93
ANIMAL ID	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010
* TOTALS										

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active		1									1 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Atrophy			1								1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

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
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 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	9	9	9	9	9	9	9	9	9	9			
HARLAN SPRAGUE DAWLEY RATS MALE CONTROL	3	3	3	3	3	3	3	3	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	0	0	0	1			
	1	2	3	4	5	6	7	8	9	0			
											* TOTALS		
Harderian Gland	+	+	+	+	+	+	+	+	+	+		10	
Inflammation, Neutrophil								1				1	1.0
Inflammation, Chronic		1	1				1		3			4	1.5
URINARY SYSTEM													
Kidney	+	+	+	+	+	+	+	+	+	+		10	
Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1		10	1.0
Nephropathy, Chronic	1	2	2	1	2	1	2	2	1	2		10	1.6
Urinary Bladder	+	+	+	+	+	+	+	+	+	+		10	

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DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE 125 ppm	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
	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		
	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Liver + + + + + + + + + + **10**

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex + + + + + + + + + + **10**

Adrenal Medulla + + + + + + + + + + **10**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis + + + + + + + + + + **10**

Testes + + + + + + + + + + **10**

HEMATOPOIETIC SYSTEM

Thymus + + + + + + + + + + **10**

INTEGUMENTARY 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

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HARLAN SPRAGUE DAWLEY RATS MALE 125 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		3	3	3	3	3	3	3	3	3	
	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	
											* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland	+	+	+	+	+	+	+	+	+	+	10	
Degeneration					1							1 1.0
Inflammation, Chronic	2	1	1		3	3			2			6 2.0

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10	
Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1		10 1.0
Nephropathy, Chronic	2	1	1	1	1	1	1	2	2	1		10 1.3

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS	3	3	3	3	3	3	3	3	3	3		
MALE												
250 ppm												
	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	4	4	4		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
											* TOTALS	

ALIMENTARY SYSTEM

Intestine Large, Colon												
Hyperplasia, Lymphoid				+								1
				4								1 4.0
Intestine Small, Ileum									+			1
Peyer's Patch, Hyperplasia									1			1 1.0
Liver												10
Inflammation, Chronic Active									+	+		1 1.0
Centrilobular, Hepatocyte, Hypertrophy									1	1		8 1.0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex												10
Adrenal Medulla												10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis												10
Hypospermia												1 4.0

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS MALE	3	3	3	3	3	3	3	3	3	3	
250 ppm											
ANIMAL ID	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	4	4	4	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
	* TOTALS										
Duct, Exfoliated Germ Cell	4										1 4.0
Testes	+ + + + + + + + + +										10
Germ Cell, Degeneration	4										1 4.0
HEMATOPOIETIC SYSTEM											
Thymus	+ + + + + + + + + +										10
INTEGUMENTARY SYSTEM											
NONE											
MUSCULOSKELETAL SYSTEM											
NONE											
NERVOUS SYSTEM											
NONE											
RESPIRATORY SYSTEM											
Lung											1
Congestion											1 2.0
SPECIAL SENSES SYSTEM											
Harderian Gland	+ + + + + + + + + +										10
Degeneration	1	1	1	2	1		1	1	1	1	9 1.1
Inflammation, Chronic	1		1		3	1	3		1		6 1.7

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HARLAN SPRAGUE DAWLEY RATS MALE 250 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		3	3	3	3	3	3	3	3	3	
	ANIMAL ID	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	4	4	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	

*** TOTALS**

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	10	
Accumulation, Hyaline Droplet	2	2	1	2	2	1	2	1	2		10 1.6
Nephropathy, Chronic	1	1	1	1	3	2	2	2	1		10 1.5

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS MALE	9	9	9	9	9	9	9	9	9
500 ppm	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	10
Clear Cell Focus			X								1
Centrilobular, Hepatocyte, Hypertrophy	1	1	1	1	1	1	1	1	1	1	10 1.0

CARDIOVASCULAR SYSTEM

Blood Vessel									+		1
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ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Hypospermia				4							1 4.0
Testes	+	+	+	+	+	+	+	+	+	+	10
Germinal Epithelium, Atrophy				3							1 3.0
Rete Testes, Dilation				3							1 3.0
Seminiferous Tubule, Dilation				2							1 2.0
Seminiferous Tubule, Spermatid Retention	2		1						1		3 1.3

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS MALE	9	9	9	9	9	9	9	9	9
500 ppm	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

HEMATOPOIETIC SYSTEM

Thymus + + + + + + + + + + **10**

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland	+ + + + + + + + + +	10	
Degeneration	1 2 1 2 1 1 1 2 1 2		10 1.4
Inflammation, Chronic	3 2 1 1 2 2 3 1 2		9 1.9

URINARY SYSTEM

Kidney	+ + + + + + + + + +	10	
Accumulation, Hyaline Droplet	2 2 2 2 2 2 2 2 2 2		10 2.0

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS	3	3	3	3	3	3	3	3	3	3		
MALE												
500 ppm												
	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	6	6	6	6	6		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
											* TOTALS	
Nephropathy, Chronic	1	1	1	1	2	1	3	2	3	2		10 1.7

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		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS		9	9	9	9	9	9	9	9	9	9
MALE		3	3	3	3	3	3	3	3	3	3
1000 ppm											
ANIMAL ID		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
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	10
Necrosis								1			1 1.0
Centrilobular, Hepatocyte, Hypertrophy	2	2	2	2	2	2	2	2	1	2	10 1.9

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Duct, Exfoliated Germ Cell			1								1 1.0
Testes	+	+	+	+	+	+	+	+	+	+	10
Germ Cell, Degeneration			1			1					2 1.0
Seminiferous Tubule, Spermatid Retention		1						2	2	1	4 1.5

HEMATOPOIETIC SYSTEM

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	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS MALE	3	3	3	3	3	3	3	3	3	3		
1000 ppm												
ANIMAL ID	0	0	0	0	0	0	0	0	0	0		
	8	8	8	8	8	8	8	8	8	8		
	0	0	0	0	0	0	0	0	0	1		
	1	2	3	4	5	6	7	8	9	0		
											* TOTALS	
Thymus	+	+	+	+	+	+	+	+	+	+	10	
INTEGUMENTARY SYSTEM												
NONE												
MUSCULOSKELETAL SYSTEM												
NONE												
NERVOUS SYSTEM												
NONE												
RESPIRATORY SYSTEM												
Lung											1	
Inflammation, Focal, Chronic Active											1	1.0
SPECIAL SENSES SYSTEM												
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10	
Degeneration	1	1	1	1	1	1	1	1	2	1	10	1.1
Inflammation, Chronic				2	1	2	1			1	6	1.5
URINARY SYSTEM												
Kidney	+	+	+	+	+	+	+	+	+	+	10	
Accumulation, Hyaline Droplet	3	3	3	3	3	3	3	3	3	3	10	3.0
Nephropathy, Chronic	3	1	2	1	2	2	2	1	1	2	10	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: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS MALE		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		3	3	3	3	3	3	3	3	3	3
	2000 ppm										
ANIMAL ID		0	0	0	0	0	0	0	0	0	
		1	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	
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	M	+	+	+	+	+	+	+	+	+	9
Intestine Large, Cecum		+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon		+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum		+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum		+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum		+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum		+	+	+	+	+	+	+	+	+	10
Liver		+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule						X					1
Inflammation, Chronic Active							2				1 2.0
Necrosis							2		2		2 2.0
Centrilobular, Hepatocyte, Hypertrophy		2	2	2	2	2	2	2	2	2	10 2.0
Pancreas		+	+	+	+	+	+	+	+	+	10
Salivary Glands		+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	10
Stomach, Glandular		+	+	+	+	+	+	+	+	+	10

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS		9	9	9	9	9	9	9	9	9	9
MALE		3	3	3	3	3	3	3	3	3	3
2000 ppm											
ANIMAL ID		0	0	0	0	0	0	0	0	0	0
		1	1	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	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy		1					1	1			3 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Vacuolization Cytoplasmic	1	1	1	1	1			1		1	7 1.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	M	M	+	+	M	+	M	M	M	+	4
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Duct, Exfoliated Germ Cell	2	1	1	2				2		1	6 1.5

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

Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
HARLAN SPRAGUE DAWLEY RATS MALE	3	3	3	3	3	3	3	3	3	3	
2000 ppm											* TOTALS
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	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	1	
	1	2	3	4	5	6	7	8	9	0	
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Histiocyte, Focal		1	1		1	1					4 1.0
Metaplasia, Osseous								1			1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet		1		1			1				3 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Polymorphonuclear		2									1 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Degeneration	2	2	2	2	2	2	2	2	2	2	10 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
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 BLANK .. Not examined microscopically

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

Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE CONTROL	9	9	9	9	9	9	9	9	9
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
	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
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

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

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

Experiment Number: 10472 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 08/05/2016

Time Report Requested: 10:34:45

First Dose M/F: 10/26/09 / 10/26/09

Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE CONTROL	DAY ON TEST	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
		9	9	9	9	9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4	4	4	4	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	1	1	1	1	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0				
* TOTALS															

Cardiomyopathy

1

1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex

+ + + + + + + + +

10

Adrenal Medulla

+ + + + + + + + +

10

Islets, Pancreatic

+ + + + + + + + +

10

Parathyroid Gland

+ + + + + + + + +

10

Pituitary Gland

+ + + + + + + + +

10

Thyroid Gland

+ + + + + + + + +

10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

+ + + + + + + + M +

9

Inflammation, Chronic Active

1

1 1.0

Ovary

+ + + + + + + + +

10

Uterus

+ + + + + + + + +

10

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: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE CONTROL	DAY ON TEST										* TOTALS
	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	
ANIMAL ID	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	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	M	+	+	M	+	+	+	8
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mediastinal	M	M	+	+	+	+	+	+	+	+	8
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland Hyperplasia	+	+	+	+	+	+	+	+	+	+	10
	1										1 1.0
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY 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: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE CONTROL	DAY ON TEST										* TOTALS
	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	
ANIMAL ID	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	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Histiocyte, Focal			1								1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Erosion										2	1 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	1				1	1	1	1	1	1	7 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy, Chronic	1	1		1	1	1	1	1			7 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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

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

Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE 125 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4		
	ANIMAL ID	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		
		0	0	0	0	0	0	0	0	1		
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Liver + + + + + + + + + + **10**

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex + + + + + + + + + + **10**

Adrenal Medulla + + + + + + + + + + **10**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Thymus + + + + + + + + + + **10**

INTEGUMENTARY SYSTEM

Mammary Gland + + + + + + + + + + **10**

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: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE 125 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	* TOTALS
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		4	4	4	4	4	4	4	4	4	4	
	ANIMAL ID	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	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland	+	+	+	+	+	+	+	+	+	+	10	
Atrophy									1			1 1.0
Degeneration	1				1					1		3 1.0
Inflammation, Chronic										1		1 1.0

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10	
Nephropathy, Chronic	1	1								1 1		4 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: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS FEMALE 250 ppm		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4
	ANIMAL ID	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	5	5	5	5	5	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
* TOTALS											

ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule									X		1

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary									+		1
Cyst									1		1 1.0

HEMATOPOIETIC SYSTEM

Thymus	+	+	+	+	+	+	+	+	+	+	10
--------	---	---	---	---	---	---	---	---	---	---	-----------

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
---------------	---	---	---	---	---	---	---	---	---	---	-----------

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

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

Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 08/05/2016
 Time Report Requested: 10:34:45
 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE 250 ppm	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
		9	9	9	9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4	4	4	4
	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
		5	5	5	5	5	5	5	5	5	5	5	5	5
		0	0	0	0	0	0	0	0	0	0	0	1	0
		1	2	3	4	5	6	7	8	9	0			

* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland	+	+	+	+	+	+	+	+	+	+	10		
Degeneration		1	1				1	1	1			5	1.0
Inflammation, Chronic			2				1	1				3	1.3

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10		
Nephropathy, Chronic	1	1	1	1	1				1	1		7	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
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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Experiment Number: 10472 - 01
 Test Type: 90-DAY
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 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0
500 ppm	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
	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
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

ALIMENTARY SYSTEM

Liver + + + + + + + + + + **10**

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex + + + + + + + + + + **10**

Adrenal Medulla + + + + + + + + + + **10**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Lymph Node + **1**

Lumbar, Hyperplasia, Lymphoid 2 **1 2.0**

Thymus + + + + + + + + + + **10**

INTEGUMENTARY SYSTEM

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 + .. Tissue examined microscopically M .. Missing tissue
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Experiment Number: 10472 - 01
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 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0
500 ppm	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
	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
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

Mammary Gland Hyperplasia	+	+	+	+	+	+	+	+	+	+	10
		1		1	1			2			4 1.3

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland Degeneration Inflammation, Chronic	+	+	+	+	+	+	+	+	+	+	10
	1	2	1		1	1	1	1	1	1	9 1.1
			2	1		3	2	1		1	6 1.7

URINARY SYSTEM

Kidney Nephropathy, Chronic	+	+	+	+	+	+	+	+	+	+	10
	1	1	2	1	1	1	1	2		1	9 1.2

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Experiment Number: 10472 - 01
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 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	9	9	9	9	9	9	9	9	9	9		
HARLAN SPRAGUE DAWLEY RATS FEMALE 1000 ppm	4	4	4	4	4	4	4	4	4	4	9	
	0	0	0	0	0	0	0	0	0	0	1	
	0	0	0	0	0	0	0	0	0	0	2	
	9	9	9	9	9	9	9	9	9	9	3	
	0	0	0	0	0	0	0	0	0	0	4	
	0	0	0	0	0	0	0	0	0	0	5	
	0	0	0	0	0	0	0	0	0	0	6	
	0	0	0	0	0	0	0	0	0	0	7	
	0	0	0	0	0	0	0	0	0	0	8	
	0	0	0	0	0	0	0	0	0	0	9	
	0	0	0	0	0	0	0	0	0	0	0	
	* TOTALS											

ALIMENTARY SYSTEM

Liver	+	+	+	+	+	+	+	+	+	+		10	
Hepatodiaphragmatic Nodule					X							1	
Inflammation, Chronic Active								1				1	1.0
Centrilobular, Hepatocyte, Hypertrophy	2	1	2	1	1	1	2	1	1	1		10	1.3

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		10	
Vacuolization Cytoplasmic			1			1		1		1		4	1.0
Adrenal Medulla	+	+		+	+	+	+	+	+	+		9	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Thymus	+	+	+	+	+	+	+	+	+	+		10	
--------	---	---	---	---	---	---	---	---	---	---	--	-----------	--

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Experiment Number: 10472 - 01
 Test Type: 90-DAY
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

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 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE 1000 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	9	9	9	9	9	9	9	9	9	9	9	9	9
		4	4	4	4	4	4	4	4	4	4	4	4	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
		9	9	9	9	9	9	9	9	9	9	9	9	9
		0	0	0	0	0	0	0	0	0	0	0	1	0
		1	2	3	4	5	6	7	8	9	0			
													* TOTALS	

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia		1		1	3	1		1		1	6 1.3

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

NONE

SPECIAL SENSES SYSTEM

Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Degeneration	1	1	2	2	1	1	1	2	2	2	10 1.5
Inflammation, Chronic		1	2	1			2			1	5 1.4

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy, Chronic	1	1	1	1	1	1	1	1	2	1	10 1.1

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 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
HARLAN SPRAGUE DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	4	9	
	4	4	4	4	4	4	4	4	5	4	
	FEMALE										
2000 ppm	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10	
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10	
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10	
Liver	+	+	+	+	+	+	+	+	+	+	10	
Clear Cell Focus		X						X				2
Centrilobular, Hepatocyte, Hypertrophy	2	2	2	2	2	2	2	2	2	2	10	2.0
Mesentery								+			1	
Fat, Necrosis								1				1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10	
Infiltration Cellular, Polymorphonuclear						1						1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10	
Atrophy									4			4.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10	

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Date Report Requested: 08/05/2016
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 First Dose M/F: 10/26/09 / 10/26/09
 Lab: BNW

HARLAN SPRAGUE DAWLEY RATS FEMALE 2000 ppm	DAY ON TEST										ANIMAL ID			
	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4	0 9 4				0 9 4
	0	0	0	0	0	0	0	0	0	0	0			
	1	1	1	1	1	1	1	1	1	1	1			
	1	1	1	1	1	1	1	1	1	1	1			
	0	0	0	0	0	0	0	0	0	0	0			
	1	2	3	4	5	6	7	8	9	0				
												* TOTALS		
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+			10
Tongue											+			1
Inflammation, Chronic Active											4			1 4.0
CARDIOVASCULAR SYSTEM														
Blood Vessel	+	+	+	+	+	+	+	+	+	+	+			10
Heart	+	+	+	+	+	+	+	+	+	+	+			10
ENDOCRINE SYSTEM														
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+			10
Vacuolization Cytoplasmic	1	1	1	1	1	1	1	1	1	1	1			10 1.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+			10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+			10
Parathyroid Gland	M	M	M	+	+	M	+	M	+	+				5
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+			10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+			10
GENERAL BODY SYSTEM														
NONE														

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 + .. Tissue examined microscopically
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0
2000 ppm	9	9	9	9	9	9	9	9	4	9
ANIMAL ID	4	4	4	4	4	4	4	4	5	4
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active								2			1 2.0
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	M	+	+	+	+	+	+	+	+	+	9
Lymph Node, Mandibular	+	+	+	M	+	+	+	+	+	+	9
Lymph Node, Mediastinal	+	+	+	+	+	+	M	+	M	+	8
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus Atrophy	+	+	+	+	+	+	+	+	+	+	10
								3			1 3.0

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Hyperplasia	1	2	2	1	2	3	2	1	2	3	10 1.9

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID			
	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4	9 4	4 5		9 4		
HARLAN SPRAGUE DAWLEY RATS FEMALE 2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	
	1	1	1	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0				* TOTALS
Skin	+	+	+	+	+	+	+	+	+	+				10
MUSCULOSKELETAL SYSTEM														
Bone	+	+	+	+	+	+	+	+	+	+				10
NERVOUS SYSTEM														
Brain	+	+	+	+	+	+	+	+	+	+				10
RESPIRATORY SYSTEM														
Larynx	+	+	+	+	+	+	+	+	+	+				10
Lung	+	+	+	+	+	+	+	+	+	+				10
Infiltration Cellular, Histiocyte, Focal Inflammation, Chronic Active Metaplasia, Osseous				1										1 1.0
								1						1 1.0
									1					1 1.0
Nose	+	+	+	+	+	+	+	+	+	+				10
Erosion										2				1 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet			1	1	2		2	1		1				6 1.3
Trachea	+	+	+	+	+	+	+	+	+	+				10
SPECIAL SENSES SYSTEM														
Eye	+	+	+	+	+	+	+	+	+	+				10
Harderian Gland	+	+	+	+	+	+	+	+	+	+				10

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