

**Experiment Number:** 20523 - 04  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
Metal Working Fluids: Trim VX  
**CAS Number:** TRIMVX

**Date Report Requested:** 02/02/2015  
**Time Report Requested:** 13:50:12  
**First Dose M/F:** 08/03/09 / 08/03/09  
**Lab:** BNW

F1\_M3

**NTP Study Number:** C20523  
**Lock Date:** 06/04/2012  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.2\_002  
**PWG Approval Date:** NONE

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE Control	DAY ON TEST	0729	0730	0731	0732	0733	0734	0735	0736	0737	0738	0739	0740	0741	0742	0743	0744	0745	0746	0747	0748	0749	0750	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

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gallbladder Lymphoma Malignant	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum Adenoma Lymphoma Malignant	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum Lymphoma Malignant	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma						X			X	X				X	X					X				X	
Hepatocellular Adenoma, Multiple			X	X	X			X								X			X		X			X	
Hepatocellular Carcinoma			X		X							X	X	X				X		X				X	
Hepatocellular Carcinoma, Multiple					X											X			X		X			X	

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST																									males (cont...)
	0729	0730	0731	0732	0733	0734	0735	0736	0737	0738	0739	0740	0741	0742	0743	0744	0745	0746	0747	0748	0749	0750	0751	0752		
Control	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
	1234	5678	9012	3456	7890	1234	5678	9012	3456	7890	1234	5678	9012	3456	7890	1234	5678	9012	3456	7890	1234	5678	9012			

Mast Cell Tumor Malignant, Metastatic, Bone Marrow

Adrenal Medulla

Islets, Pancreatic

Parathyroid Gland

Pituitary Gland  
 Pars Distalis, Adenoma

Thyroid Gland

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis  
 Lymphoma Malignant

Preputial Gland

Prostate  
 Lymphoma Malignant

Seminal Vesicle  
 Lymphoma Malignant

Testes

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

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 (cont...)		
<b>B6C3F1 MICE MALE</b> <b>Control</b>	ANIMAL ID	7	7	7	7	4	7	6	7	7	7	7	7	5	7	6	6	7	7	7	7	7	7	7		7	
		2	3	2	3	1	2	4	3	3	3	2	2	3	4	2	1	1	3	3	3	3	2	3		2	2
		9	0	9	0	4	9	6	1	1	0	9	9	1	9	9	9	8	0	1	1	0	0	9		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	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	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	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	

Lymphoma Malignant X

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lymphoma Malignant														X											X	
Mast Cell Tumor Malignant																										
Lymph Node																										
Pancreatic, Lymphoma Malignant																									+	+
Renal, Lymphoma Malignant																										X
Lymph Node, Bronchial	+	+	+	M	M	M	+	M	+	+	M	+	I	+	M	+	+	+	+	+	+	+	+	+	+	
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung															X											
Hepatocellular Carcinoma, Metastatic, Liver																										
Lymphoma Malignant	X													X											X	
Lymph Node, Mandibular	+	+	+	I	M	+	+	+	+	M	+	M	+	M	M	M	+	+	M	M	M	M	+	M	M	
Lymphoma Malignant	X																									
Lymph Node, Mediastinal	+	+	+	+	M	I	M	M	+	I	I	+	+	+	M	+	+	+	+	M	+	+	M	M	M	
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung															X											
Lymphoma Malignant	X													X											X	
Mast Cell Tumor Malignant, Metastatic, Bone Marrow																										
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	
Lymphoma Malignant	X																X									

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE		DAY ON TEST																									males (cont...)				
Control		0729	0730	0739	0740	0741	0742	0743	0744	0745	0746	0747	0748	0749	0750	0751	0752	0753	0754	0755	0756	0757	0758	0759	0760	0761		0762	0763	0764	0765
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	0027	0028	0029

Spleen Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	X									X	X					X														
Thymus Hepatocellular Carcinoma, Metastatic, Liver Lymphoma Malignant Mast Cell Tumor Malignant, Metastatic, Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	+					
												X																		

**INTEGUMENTARY SYSTEM**

Mammary Gland	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	+	+	M	M	M	M	M	M	M	M
Skin Fibrosarcoma	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
												X													

**MUSCULOSKELETAL SYSTEM**

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**NERVOUS SYSTEM**

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**RESPIRATORY SYSTEM**

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lung Alveolar/Bronchiolar Adenoma Alveolar/Bronchiolar Adenoma, Multiple	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	X													X		X									

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

B6C3F1 MICE MALE Control	DAY ON TEST	0729	0730	0739	0740	0741	0742	0743	0744	0745	0746	0747	0748	0749	0750	0751	0752	0753	0754	0755	0756	0757	0758	0759	ANIMAL ID	males (cont...)	
	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
Alveolar/Bronchiolar Carcinoma		X									X													X			
Alveolar/Bronchiolar Carcinoma, Multiple										X						X											
Hepatocellular Carcinoma, Metastatic, Liver				X										X				X							X		
Lymphoma Malignant												X															
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lymphoma Malignant												X															
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
<b>SPECIAL SENSES SYSTEM</b>																											
Eye		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Harderian Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Adenoma						X						X				X											
Carcinoma				X																							
<b>URINARY SYSTEM</b>																											
Kidney		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Mast Cell Tumor Malignant, Metastatic, Bone Marrow																											
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lymphoma Malignant												X															
<b>SYSTEMIC LESIONS</b>																											
Multiple Organ		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lymphoma Malignant		X										X	X					X									

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE Control	DAY ON TEST	0730	0739	0756	0748	0771	0777	0777	0777	0777	0765	0757	0777	0777	0777	0777	0777	0733	0773	0777	0766	0777	0777	0777	0777	* TOTALS
	ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Gallbladder Lymphoma Malignant	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	A	M	+	+	+	43 1
Intestine Large, Cecum	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	A	+	+	+	+	+	45
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	48
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	A	+	I	+	+	+	+	A	+	+	+	+	+	+	+	46
Intestine Small, Duodenum Adenoma Lymphoma Malignant	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	A	+	+	+	+	44 2 1
Intestine Small, Ileum Lymphoma Malignant	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	A	+	+	+	+	45 2
Intestine Small, Jejunum Lymphoma Malignant	+	+	A	A	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	45 1
Liver Alveolar/Bronchiolar Carcinoma, Metastatic, Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1
Hepatocellular Adenoma																										13
Hepatocellular Adenoma, Multiple			X						X		X															10
Hepatocellular Carcinoma																										10
Hepatocellular Carcinoma, Multiple				X	X						X	X	X	X								X			X	11

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

<b>B6C3F1 MICE MALE</b>	<b>DAY ON TEST</b>																								<b>* TOTALS</b>		
	0730	0729	0728	0727	0726	0725	0724	0723	0722	0721	0720	0719	0718	0717	0716	0715	0714	0713	0712	0711	0710	0709	0708				
<b>Control</b>	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000			
ANIMAL ID	0026	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030		
Lymphoma Malignant																X										1	
Mesentery																					+	+	+			5	
Pancreas																										50	
Salivary Glands																										50	
Stomach, Forestomach																										50	
Lymphoma Malignant																										1	
Mast Cell Tumor Malignant, Metastatic, Bone Marrow																										1	
Squamous Cell Papilloma																										1	
Stomach, Glandular																										48	
Lymphoma Malignant			A									A														1	
Tooth							+	+		+																5	
<b>CARDIOVASCULAR SYSTEM</b>																											
Blood Vessel																											50
Heart																											50
<b>ENDOCRINE SYSTEM</b>																											
Adrenal Cortex																											50
Adenoma							X															X					2
Adenoma, Multiple																											1

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 02/02/2015

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

B6C3F1 MICE MALE Control	DAY ON TEST	0730	0739	0756	0754	0777	0777	0777	0777	0766	0755	0777	0777	0777	0777	0777	0733	0777	0777	0766	0777	0777	0777	0777	* TOTALS		
	ANIMAL ID	0026	0007	0008	0009	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		0000	
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	X																								1		
Adrenal Medulla		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Parathyroid Gland		+	+	M	+	M	+	M	+	+	+	M	M	+	M	+	+	+	M	+	M	+	M	+	28		
Pituitary Gland Pars Distalis, Adenoma		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1		
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
<b>GENERAL BODY SYSTEM</b>																											
NONE																											
<b>GENITAL SYSTEM</b>																											
Epididymis Lymphoma Malignant		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1		
Preputial Gland		+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
Prostate Lymphoma Malignant		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 2		
Seminal Vesicle Lymphoma Malignant		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1		
Testes		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

<b>B6C3F1 MICE MALE</b> <b>Control</b>	DAY ON TEST	0730	0739	0756	0747	0777	0777	0777	0777	0766	0755	0777	0777	0777	0777	0777	0733	0777	0777	0766	0777	0777	0777	0777	
	ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049

Lymphoma Malignant

1

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+ +																							50	
Lymphoma Malignant																									4
Mast Cell Tumor Malignant	X																								1
Lymph Node																									3
Pancreatic, Lymphoma Malignant																									1
Renal, Lymphoma Malignant																									2
Lymph Node, Bronchial	+ +	M	+ +	I	+ +	+ +	M	+ +	M	+ +	M	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	M	+ +		38	
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung																									1
Hepatocellular Carcinoma, Metastatic, Liver																				X				1	
Lymphoma Malignant															X										4
Lymph Node, Mandibular	M	+ M	M	+ M	+ M	M	M	+ M	+ M	M	M	M	+ M	M	M	+ M	M	M	M	M	M	M	M	+ M	20
Lymphoma Malignant																									2
Lymph Node, Mediastinal	+ M	+ A	+ +	+ +	+ +	+ +	+ +	+ +	I	+ +	+ +	+ +	+ +	+ +	+ +	+ +	I	+ +	+ +	+ +	+ +	+ +	+ +	35	
Alveolar/Bronchiolar Carcinoma, Metastatic, Lung																								1	
Lymphoma Malignant																								3	
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	X																							1	
Lymph Node, Mesenteric	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	A	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	+ +	48	
Lymphoma Malignant									X						X									4	

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST	ANIMAL ID																								* TOTALS		
		0 7 3 0	0 7 2 9	0 5 9 6	0 4 8 4	0 7 3 1	0 7 2 9	0 7 3 1	0 7 2 3	0 7 3 0	0 6 2 5	0 5 7 4	0 7 3 1	0 7 2 3	0 7 3 0	0 7 3 0	0 7 2 9	0 3 8 8	0 7 3 0	0 7 3 4	0 6 7 9	0 7 7 3	0 7 2 9	0 7 2 9				
Control		0 0 0 2 6	0 0 0 2 7	0 0 0 2 8	0 0 0 2 9	0 0 0 3 0	0 0 0 3 1	0 0 0 3 2	0 0 0 3 3	0 0 0 3 3	0 0 0 3 4	0 0 0 3 5	0 0 0 3 6	0 0 0 3 7	0 0 0 3 8	0 0 0 3 9	0 0 0 4 0	0 0 0 4 1	0 0 0 4 2	0 0 0 4 3	0 0 0 4 4	0 0 0 4 5	0 0 0 4 6	0 0 0 4 7	0 0 0 4 8	0 0 0 4 9		
Spleen																										<b>49</b>		
Lymphoma Malignant																										<b>6</b>		
Thymus																										<b>44</b>		
Hepatocellular Carcinoma, Metastatic, Liver																										<b>1</b>		
Lymphoma Malignant																										<b>1</b>		
Mast Cell Tumor Malignant, Metastatic, Bone Marrow	X																									<b>1</b>		
<b>INTEGUMENTARY SYSTEM</b>																												
Mammary Gland		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	<b>3</b>
Skin																										<b>50</b>		
Fibrosarcoma																										<b>1</b>		
<b>MUSCULOSKELETAL SYSTEM</b>																												
Bone																										<b>50</b>		
<b>NERVOUS SYSTEM</b>																												
Brain																										<b>50</b>		
<b>RESPIRATORY SYSTEM</b>																												
Larynx																										<b>48</b>		
Lung																										<b>50</b>		
Alveolar/Bronchiolar Adenoma																										<b>5</b>		
Alveolar/Bronchiolar Adenoma, Multiple																										<b>1</b>		

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

B6C3F1 MICE MALE Control	DAY ON TEST																								* TOTALS		
	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730	0730			
ANIMAL ID	00026	00027	00028	00029	00030	00031	00032	00033	00034	00035	00036	00037	00038	00039	00040	00041	00042	00043	00044	00045	00046	00047	00048	00049	00050		
Alveolar/Bronchiolar Carcinoma	X								X		X							X		X					8		
Alveolar/Bronchiolar Carcinoma, Multiple																									2		
Hepatocellular Carcinoma, Metastatic, Liver												X							X	X					8		
Lymphoma Malignant													X												2		
Nose Lymphoma Malignant	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49		
Trachea	+	+	A	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	I	+	+	+	46		
<b>SPECIAL SENSES SYSTEM</b>																											
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Harderian Gland Adenoma	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Harderian Gland Carcinoma							X																		4		
															X										2		
<b>URINARY SYSTEM</b>																											
Kidney Mast Cell Tumor Malignant, Metastatic, Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
	X																								1		
Urinary Bladder Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
															X										2		
<b>SYSTEMIC LESIONS</b>																											
Multiple Organ Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
									X						X										6		

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST																								ANIMAL ID	males (cont...)
	0730	0621	0730	0674	0729	0666	0779	0752	0770	0579	0730	0764	0733	0773	0779	0487	0738	0481	0572	0739	0770	0733	0729	0700		
10 mg/m3	0020	0022	0020	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	112345	

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gallbladder Lymphoma Malignant	+	+	+	+	+	+	+	+	+	+	A	+	+	+	M	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hepatocellular Adenoma	X					X					X											X	X	
Hepatocellular Adenoma, Multiple				X		X			X				X		X		X			X				
Hepatocellular Carcinoma			X		X	X													X	X				
Hepatocellular Carcinoma, Multiple	X			X				X																
Lymphoma Malignant																		X						
Mesentery							+					+	+									+	+	
Hemangiosarcoma												X												
Hepatocellular Carcinoma, Metastatic, Liver						X															X			
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

## P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

B6C3F1 MICE MALE	DAY ON TEST																									
	0730	0621	0730	0674	0729	0665	0779	0779	0572	0753	0724	0673	0733	0723	0778	0738	0473	0748	0572	0727	0733	0723	0733	0723		
10 mg/m3	ANIMAL ID																									males (cont...)
	002001	000022	000003	000004	000005	000006	000007	000008	000009	000010	000011	000012	000013	000014	000015	000016	000017	000018	000019	000020	000021	000022	000023	000024	000025	

Hepatocellular Carcinoma, Metastatic, Liver

X

Salivary Glands

+ +

Stomach, Forestomach

+ +

Lymphoma Malignant

X

Squamous Cell Papilloma

X

Stomach, Glandular

+ +

Tooth

+ + + + + + + +

## CARDIOVASCULAR SYSTEM

Blood Vessel

+ +

Heart

+ +

Endocardium, Schwannoma Benign

## ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adenoma

Lymphoma Malignant

X

Subcapsular, Adenoma

X

Adrenal Medulla

+ +

Islets, Pancreatic

+ +

Parathyroid Gland

+ + M M + + + M + M M + M M M M + M M + M M + + +

\* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |
|-------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|
| <b>B6C3F1 MICE MALE</b> | DAY ON TEST | 0730 | 0621 | 0730 | 0674 | 0729 | 0669 | 0772 | 0759 | 0722 | 0530 | 0779 | 0664 | 0773 | 0773 | 0487 | 0748 | 0445 | 0572 | 0773 | 0773 | 0773 | 0730 | 0730 |   |   |
|                         | ANIMAL ID   | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 |   |   |
| <b>10 mg/m3</b>         |             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4 | 5 |

males  
(cont...)

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pituitary Gland | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thyroid Gland   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland<br>Histiocytic Sarcoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Prostate                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + |
| Seminal Vesicle                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Testes<br>Interstitial Cell, Adenoma   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**HEMATOPOIETIC SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow<br>Lymphoma Malignant           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X |
| Lymph Node, Bronchial<br>Lymphoma Malignant | M | + | M | M | + | + | M | + | + | X | M | M | + | + | + | + | M | M | + | + | + | + | M | + | + |
| Lymph Node, Mandibular                      | + | + | + | + | M | + | M | M | + | I | M | + | + | + | M | M | + | + | + | + | M | M | + | M | + |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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



Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|   | 0730        | 0621 | 0730 | 0674 | 0729 | 0666 | 0779 | 0779 | 0550 | 0770 | 0776 | 0667 | 0773 | 0773 | 0773 | 0773 | 0488 | 0773 | 0481 | 0572 | 0729 | 0730 | 0730 | 0730 | 0730 |           |                    |
| Lymph Node, Mediastinal   | +           | +    | +    | M    | +    | +    | I    | +    | I    | +    | +    | +    | +    | +    | M    | +    | +    | M    | +    | +    | I    | +    | +    | M    | I    |           |                    |
| Lymph Node, Mesenteric<br>Lymphoma Malignant  | +           | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| Spleen<br>Lymphoma Malignant  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| Thymus  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| <b>INTEGUMENTARY SYSTEM</b>   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Mammary Gland   | M           | M    | M    | +    | M    | M    | M    | M    | M    | M    | M    | M    | M    | M    | M    | M    | M    | M    | +    | M    | M    | M    | M    | M    | M    |           |                    |
| Skin<br>Subcutaneous Tissue, Histiocytic Sarcoma<br>Subcutaneous Tissue, Lymphoma Malignant | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| <b>MUSCULOSKELETAL SYSTEM</b>   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Bone<br>Osteoma   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| Skeletal Muscle   |             | +    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| <b>NERVOUS SYSTEM</b>   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Brain   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                    |
| Peripheral Nerve  |             | +    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 02/02/2015

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3 | 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 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 4 | 5 | 7 | 7 | 7 | 7 | 7 |           |                    |
|                              | 3           | 2 | 3 | 7 | 2 | 5 | 2 | 2 | 5 | 3 | 2 | 4 | 3 | 3 | 2 | 3 | 8 | 3 | 8 | 7 | 2 | 3 | 3 | 2 | 3 | 0         | 0                  |
|                              | 0           | 1 | 0 | 4 | 9 | 6 | 9 | 0 | 0 | 0 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 9 | 0 | 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 | 0 | 0 | 0 | 0         | 0                  |
|                              | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2         | 2                  |
|                              | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2         | 2                  |
|                              | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 0         | 0                  |

Spinal Cord

+

### RESPIRATORY SYSTEM

Larynx

+ +

Lung

+ +

Alveolar/Bronchiolar Adenoma

X X X X

Alveolar/Bronchiolar Adenoma, Multiple

X X

Alveolar/Bronchiolar Carcinoma

X X

Hepatocellular Carcinoma, Metastatic, Liver

X X

Lymphoma Malignant

X X

Mediastinum, Hepatocellular Carcinoma, Metastatic, Liver

X X

Nose

+ +

Pleura

Trachea

+ +

### SPECIAL SENSES SYSTEM

Eye

+ +

Harderian Gland

+ +

Adenoma

X X X

Carcinoma

### URINARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |
|------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|                  | 0730        | 0621 | 0730 | 0674 | 0729 | 0666 | 0779 | 0779 | 0579 | 0779 | 0674 | 0779 | 0677 | 0779 | 0677 | 0478 | 0738 | 0483 | 0781 | 0472 | 0729 | 0730 | 0733 | 0729 | 0730 |           |                    |
| 10 mg/m3         | 000         | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  | 000  |           |                    |
|                  | 220         | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  | 220  |           |                    |
|                  | 123         | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  | 123  |           |                    |

Kidney  
 Lymphoma Malignant

+ + + + + + + + + X + + + + + + + + X + + + + + + +

Urinary Bladder

+ +

### SYSTEMIC LESIONS

Multiple Organ  
 Histiocytic Sarcoma  
 Lymphoma Malignant

+ + + + + + + + + X + + + + + + + + X + + + + + + +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
Test Type: CHRONIC  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
Metal Working Fluids: Trim VX  
**CAS Number: TRIMVX**

Date Report Requested: 02/02/2015  
Time Report Requested: 13:50:12  
First Dose M/F: 08/03/09 / 08/03/09  
Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3 | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |   |   |
|------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|---|---|
|                              | 0730        | 0730 | 0722 | 0722 | 0731 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 | 0723 |          | 0723 | 0723 |   |   |
| ANIMAL ID                    | 0022        | 0022 | 0022 | 0022 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023 | 0023     | 0023 |      |   |   |
|                              | 6           | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6        | 7    | 8    | 9 | 0 |

### ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| Esophagus                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Gallbladder Lymphoma Malignant              | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 46<br>1 |
| Intestine Large, Cecum                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49      |
| Intestine Large, Colon                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Intestine Large, Rectum                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | I | + | + | + | + | 48      |
| Intestine Small, Duodenum                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48      |
| Intestine Small, Ileum                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49      |
| Intestine Small, Jejunum                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48      |
| Liver                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Hepatocellular Adenoma                      |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |   | X | X | X |   |   |   |   | 11      |
| Hepatocellular Adenoma, Multiple            | X |   | X | X |   |   |   |   | X | X |   |   | X | X |   | X |   |   |   |   |   | X | X | X | 18      |
| Hepatocellular Carcinoma                    |   |   |   | X |   |   | X | X | X |   |   |   | X | X |   | X |   |   |   |   |   | X |   |   | 13      |
| Hepatocellular Carcinoma, Multiple          | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 5       |
| Lymphoma Malignant                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Mesentery                                   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   | + |   | 7       |
| Hemangiosarcoma                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Hepatocellular Carcinoma, Metastatic, Liver |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2       |
| Pancreas                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3   | DAY ON TEST                                 |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | * TOTALS |
|--------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
|                                | 0730  | 0730   | 0732   | 0732   | 0733   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   | 0739   |        |          |
| ANIMAL ID                      | 002226                                      | 002227 | 002228 | 002229 | 002230 | 002231 | 002232 | 002233 | 002234 | 002235 | 002236 | 002237 | 002238 | 002239 | 002240 | 002241 | 002242 | 002243 | 002244 | 002245 | 002246 | 002247 | 002248 | 002249 |          |
|                                | Hepatocellular Carcinoma, Metastatic, Liver |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1        |
| Salivary Glands                | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Stomach, Forestomach           | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Lymphoma Malignant             |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |          |
| Squamous Cell Papilloma        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |          |
| Stomach, Glandular             | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Tooth                          |   | +      | +      |        |        |        |        |        | +      |        |        |        |        |        |        |        |        |        | +      |        |        | +      |        | 10     |          |
| <b>CARDIOVASCULAR SYSTEM</b>   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |
| Blood Vessel                   | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Heart                          | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Endocardium, Schwannoma Benign | X   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |          |
| <b>ENDOCRINE SYSTEM</b>        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |
| Adrenal Cortex                 | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Adenoma                        |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | X      |        |        |        |        | 1      |          |
| Lymphoma Malignant             |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 1      |          |
| Subcapsular, Adenoma           |   |        |        |        |        |        |        |        |        | X      |        |        |        |        |        |        |        |        |        |        |        |        | X      | 3      |          |
| Adrenal Medulla                | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Islets, Pancreatic             | +   | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | +      | 50     |          |
| Parathyroid Gland              | +   | +      | +      | +      | +      | M      | +      | +      | +      | +      | +      | M      | M      | +      | +      | M      | M      | M      | +      | +      | M      | M      | +      | +      | 28       |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3 | 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 | * TOTALS |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|                              | ANIMAL ID   | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |          |
|                              |             | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 5 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |          |
|                              |             | 0 | 0 | 9 | 8 | 1 | 9 | 0 | 8 | 0 | 6 | 0 | 9 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 |          |
|                              |             | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |          |
|                              |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |          |
|                              |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |          |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Thyroid Gland   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Epididymis                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Preputial Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma        |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Prostate                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Seminal Vesicle            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Testes                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Interstitial Cell, Adenoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | 1  |

**HEMATOPOIETIC SYSTEM**

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymph Node, Bronchial  | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | M | + | M | I | + | + | + | + | 37 |
| Lymphoma Malignant     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | + | + | + | + | M | M | M | M | M | + | + | + | + | + | + | M | + | 27 |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>10 mg/m3  | DAY ON TEST | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>0      | 0<br>6<br>2<br>8      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>6<br>2<br>8      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>6<br>2<br>9      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>6<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>6<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>1      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | * TOTALS     |
|---|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
|   | ANIMAL ID   | 0<br>0<br>2<br>2<br>6 | 0<br>0<br>2<br>2<br>7 | 0<br>0<br>2<br>2<br>8 | 0<br>0<br>2<br>2<br>9 | 0<br>0<br>2<br>3<br>0 | 0<br>0<br>2<br>3<br>1 | 0<br>0<br>2<br>3<br>2 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>4<br>0 | 0<br>0<br>2<br>4<br>1 | 0<br>0<br>2<br>4<br>2 | 0<br>0<br>2<br>4<br>3 | 0<br>0<br>2<br>4<br>4 | 0<br>0<br>2<br>4<br>5 | 0<br>0<br>2<br>4<br>6 | 0<br>0<br>2<br>4<br>7 | 0<br>0<br>2<br>4<br>8 | 0<br>0<br>2<br>4<br>9 |              |
| Lymph Node, Mediastinal   |             | I                     | +                     | +                     | I                     | +                     | +                     | M                     | I                     | +                     | +                     | I                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | I                     | +                     | 35           |
| Lymph Node, Mesenteric<br>Lymphoma Malignant  |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 49<br>2      |
| Spleen<br>Lymphoma Malignant  |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50<br>2      |
| Thymus  |             | I                     | +                     | +                     | I                     | +                     | +                     | +                     | I                     | +                     | I                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 44           |
| <b>INTEGUMENTARY SYSTEM</b>   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |              |
| Mammary Gland   |             | M                     | M                     | M                     | M                     | M                     | M                     | +                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | M                     | 3            |
| Skin<br>Subcutaneous Tissue, Histiocytic Sarcoma<br>Subcutaneous Tissue, Lymphoma Malignant |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50<br>1<br>1 |
| <b>MUSCULOSKELETAL SYSTEM</b>   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |              |
| Bone<br>Osteoma   |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50<br>1      |
| Skeletal Muscle   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1            |
| <b>NERVOUS SYSTEM</b>   |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |              |
| Brain   |             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50           |
| Peripheral Nerve  |             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1            |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

| B6C3F1 MICE MALE | DAY ON TEST |      | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|------------------|-------------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|                  | 0730        | 0730 | 0730      | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 |          |
| 10 mg/m3         | 0730        | 0730 | 0730      | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 | 0730 |          |

Spinal Cord 1

### RESPIRATORY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx   | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lung   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma                             | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | 7  |
| Alveolar/Bronchiolar Adenoma, Multiple                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Alveolar/Bronchiolar Carcinoma                           |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | X | X |   |   | X |   |   | 8  |
| Hepatocellular Carcinoma, Metastatic, Liver              | X |   |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5  |
| Lymphoma Malignant                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Mediastinum, Hepatocellular Carcinoma, Metastatic, Liver |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Nose   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pleura   |   |   |   |   |   |   |   |   |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Trachea  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

### SPECIAL SENSES SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma         | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 5  |
| Carcinoma       |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   | X |   |   |   |   | 3  |

### URINARY SYSTEM

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

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











Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3                       | DAY ON TEST | 0729 | 0729 | 0730 | 0762 | 0773 | 0776 | 0767 | 0776 | 0759 | 0755 | 0777 | 0777 | 0766 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0733 | 0777 | 0777 | ANIMAL ID | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|
|  | 0040        | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 | 0004 |           |                    |
| Lymphoma Malignant                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | X                  |
| Seminal Vesicle                                    |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | +                  |
| Lymphoma Malignant                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           | X                  |
| Testes   |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| <b>HEMATOPOIETIC SYSTEM</b>                        |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Bone Marrow  |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Schwannoma Malignant, Metastatic, Peripheral Nerve |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Lymph Node   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Iliac, Lymphoma Malignant                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | +         |                    |
| Pancreatic, Lymphoma Malignant                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Pancreatic, Sarcoma, Metastatic, Mesentery         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Renal, Lymphoma Malignant                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Renal, Sarcoma, Metastatic, Mesentery              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                    |
| Lymph Node, Bronchial                              |             | +    | +    | +    | +    | +    | M    | +    | +    | +    | M    | +    | +    | A    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +         |                    |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Lymphoma Malignant                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Lymph Node, Mandibular                             |             | +    | M    | M    | +    | M    | +    | M    | +    | +    | M    | M    | +    | M    | +    | +    | M    | +    | +    | +    | M    | +    | +    | +         |                    |
| Lymphoma Malignant                                 |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |                    |
| Lymph Node, Mediastinal                            |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | M    | M    | +    | +    | +    | +    | +    | +    | +    | +         |                    |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I         |                    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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











Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3                     | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0697        | 0731  | 0779  | 0773  | 0674  | 0773  | 0661  | 0772  | 0771  | 0773  | 0773  | 0772  | 0772  | 0573  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  |          |
| ANIMAL ID  | 00426       | 00442 | 00442 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 |          |
| Sarcoma, Metastatic, Mesentery                   |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Mesentery  |             | +     |       |       |       |       |       | +     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |          |
| Hemangiosarcoma                                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Sarcoma  |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Pancreas   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Salivary Glands                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |
| Stomach, Forestomach                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Squamous Cell Papilloma                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 1     |          |
| Stomach, Glandular                               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Sarcoma, Metastatic, Mesentery                   |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Tooth  |             |       | +     |       |       |       |       |       |       |       | +     | +     |       |       |       |       |       |       |       |       |       | +     |       | 8     |          |
| <b>CARDIOVASCULAR SYSTEM</b>                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Blood Vessel                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Aorta, Lymphoma Malignant, Metastatic, Spleen    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Heart  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | X     |       |       |       |       |       |       | 3     |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3 | DAY ON TEST | 0697  | 0731  | 0779  | 0770  | 0671  | 0672  | 0771  | 0772  | 0773  | 0774  | 0775  | 0776  | 0777  | 0778  | 0779  | 0770  | 0771  | 0772  | 0773  | 0774  | 0775  | 0776  | 0777  | 0778  | 0779  | * TOTALS |
|------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|                              | ANIMAL ID   | 00426 | 00447 | 00448 | 00449 | 00450 | 00451 | 00452 | 00453 | 00454 | 00455 | 00456 | 00457 | 00458 | 00459 | 00460 | 00461 | 00462 | 00463 | 00464 | 00465 | 00466 | 00467 | 00468 | 00469 | 00470 |          |
|                              |             | 0     | 0     | 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<br>Adenoma<br>Lymphoma Malignant<br>Subcapsular, Adenoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49<br>1<br>1<br>1 |
| Adrenal Medulla   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48                |
| Islets, Pancreatic<br>Lymphoma Malignant, Metastatic, Spleen            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 48<br>1           |
| Parathyroid Gland   | + | + | + | + | M | + | + | M | + | + | M | M | M | M | + | + | + | M | M | + | M | + | + | + | + | 36                |
| Pituitary Gland   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48                |
| Thyroid Gland   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | I | + | 47                |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| Epididymis<br>Lymphoma Malignant      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49<br>1 |
| Preputial Gland<br>Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | 48<br>1 |
| Prostate                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3                       | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |    |  |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|----|--|
|  | 0697        | 0731  | 0729  | 0730  | 0764  | 0771  | 0766  | 0772  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  | 0777  |          |    |  |
| ANIMAL ID  | 00426       | 00442 | 00442 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 | 00444 |          |    |  |
| Lymphoma Malignant                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Seminal Vesicle Lymphoma Malignant                 | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50<br>2  |    |  |
| Testes   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49       |    |  |
| <b>HEMATOPOIETIC SYSTEM</b>                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |    |  |
| Bone Marrow  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49       |    |  |
| Schwannoma Malignant, Metastatic, Peripheral Nerve |             |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Lymph Node   |             |       |       |       |       |       |       |       | +     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |    |  |
| Iliac, Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Pancreatic, Lymphoma Malignant                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Pancreatic, Sarcoma, Metastatic, Mesentery         |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Renal, Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Renal, Sarcoma, Metastatic, Mesentery              |             |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |    |  |
| Lymph Node, Bronchial                              | +           | +     | M     | +     | M     | +     | +     | I     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | M     | +     | +     | +     | M     | +        | 39 |  |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung   |             |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2  |  |
| Lymphoma Malignant                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2  |  |
| Lymph Node, Mandibular                             | I           | M     | M     | +     | M     | +     | M     | +     | I     | +     | M     | M     | +     | M     | +     | M     | M     | M     | +     | +     | +     | +     | +     | M     | M        | 25 |  |
| Lymphoma Malignant                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  |  |
| Lymph Node, Mediastinal                            | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | I     | +     | +     | +     | +     | M     | I     | +     | I     | +        | 41 |  |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung   |             |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1  |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3 | 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   | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |          | 0 |
|                              |             | 9 | 3 | 2 | 3 | 4 | 3 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 7 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 9 | 9 | 1 | 0        |   |
|                              |             | 7 | 1 | 9 | 0 | 0 | 1 | 2 |   | 0 | 0 | 0 | 9 | 3 | 0 | 2 | 1 | 9 | 9 | 1 | 0 | 9 | 9 | 1 | 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 | 0        |   |
|                              |             | 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        |   |
|                              |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5        |   |
|                              |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 |          |   |

Lymphoma Malignant

1

Lymph Node, Mesenteric  
Hemangioma

+ + + + + + + + + + I + + + + + + + + + + + + + +

47  
1

Histiocytic Sarcoma

1

Lymphoma Malignant

X

2

Sarcoma, Metastatic, Mesentery

X

1

Spleen

+ +

49

Histiocytic Sarcoma

1

Lymphoma Malignant

X

3

Thymus

+ + + + + + I + + + + + + + + + + + + + + + + +

47

Alveolar/Bronchiolar Carcinoma, Metastatic,  
Lung

X

2

Lymphoma Malignant

X

2

INTEGUMENTARY SYSTEM

Mammary Gland

M M

0

Skin

+ +

50

Lymphoma Malignant

1

Subcutaneous Tissue, Hemangiosarcoma

1

MUSCULOSKELETAL SYSTEM

Bone

+ +

50

Skeletal Muscle

+ +

2

Sarcoma, Metastatic, Mesentery

X

1

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>30 mg/m3 | 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 | * TOTALS |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
|                              |             | 6 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 0 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |          |
| ANIMAL ID                    |             | 9 | 3 | 2 | 3 | 4 | 3 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 7 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 |          |
|                              |             | 7 | 1 | 9 | 0 | 0 | 1 | 2 | 9 | 1 | 0 | 0 | 9 | 3 | 0 | 2 | 1 | 9 | 9 | 1 | 0 | 9 | 9 | 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 |          |
|                              |             | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |          |
|                              |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |          |
|                              |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |          |

Schwannoma Malignant, Metastatic, Peripheral Nerve

X

1

**NERVOUS SYSTEM**

Brain

+ 49

Peripheral Nerve  
Schwannoma Malignant

+  
X

1  
1

Spinal Cord

+

1

**RESPIRATORY SYSTEM**

Larynx

+ + + + + + + + + + + + + + + | + + + + + + + + + + 49

Lung

+ 49

Alveolar/Bronchiolar Adenoma  
 Alveolar/Bronchiolar Carcinoma  
 Alveolar/Bronchiolar Carcinoma, Multiple  
 Hepatoblastoma, Metastatic, Liver  
 Hepatocellular Carcinoma, Metastatic, Liver  
 Hepatocholangiocarcinoma, Metastatic, Liver  
 Lymphoma Malignant  
 Schwannoma Malignant, Metastatic, Peripheral Nerve  
 Bronchiole, Epithelium, Adenoma

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

5  
 7  
 2  
 1  
 4  
 1  
 1  
 1  
 1

Nose

+ 49

Trachea

+ | + + + + + + 47

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                 |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|------|
| <b>B6C3F1 MICE MALE</b><br><b>30 mg/m3</b> | DAY ON TEST | 0697 | 0731 | 0729 | 0730 | 0761 | 0772 | 0779 | 0771 | 0773 | 0772 | 0779 | 0779 | 0753 | 0770 | 0773 | 0772 | 0773 | 0773 | 0772 | 0772 | 0773 | 0773 | 0773 | 0773 | <b>* TOTALS</b> |      |
|  | ANIMAL ID   | 0042 | 0042 | 0042 | 0042 | 0043 | 0043 | 0043 | 0043 | 0043 | 0043 | 0043 | 0043 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0045 |                 | 0045 |
|  |             | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |                 | 0    |

**SPECIAL SENSES SYSTEM**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Eye             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b> |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b> |
| Adenoma         |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>3</b>  |
| Carcinoma       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   | <b>2</b>  |

**URINARY SYSTEM**

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Kidney             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b> |
| Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>2</b>  |
| Urethra            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |
| Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | <b>1</b>  |
| Urinary Bladder    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>49</b> |

**SYSTEMIC LESIONS**

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           |          |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------|
| Multiple Organ      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | <b>50</b> |          |
| Histiocytic Sarcoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |           | <b>1</b> |
| Lymphoma Malignant  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | <b>3</b>  |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|                               |             |                                     |                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------|-------------|-------------------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| B6C3F1 MICE MALE<br>100 mg/m3 | DAY ON TEST | 0730                                | 0537            | 0723 | 0743 | 0744 | 0578 | 0771 | 0773 | 0777 | 0777 | 0777 | 0777 | 0676 | 0774 | 0777 | 0777 | 0567 | 0673 | 0733 | 0733 | 0733 | 0730 | 0730 | 0730 | 0773 | 0777 | 0777 | 0777 | 0777 |
|                               | ANIMAL ID   | 0060                                | 0066            | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 |
|                               |             | 12345678901234567890123456789012345 | males (cont...) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Gallbladder                                  | M | + | + | + | M | A | I | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Large, Cecum                       | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon                       | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum                      | + | + | + | + | I | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I |
| Intestine Small, Duodenum                    | + | + | + | + | A | A | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Small, Ileum<br>Lymphoma Malignant | + | + | + | + | A | A | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + |   |   |   |   |
| Intestine Small, Jejunum                     | + | + | + | + | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |   |   |   |   |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Fibrous Histiocytoma                         |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatoblastoma                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |
| Hepatocellular Adenoma                       |   | X |   |   |   |   |   |   |   | X | X |   | X | X |   |   | X | X |   |   | X | X |   |   |   |   |   |   |   |   |
| Hepatocellular Adenoma, Multiple             | X |   | X | X |   | X |   | X | X | X |   | X |   | X |   |   | X | X |   |   |   |   |   | X |   |   |   |   |   |   |
| Hepatocellular Carcinoma                     | X |   |   |   |   | X |   | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Hepatocellular Carcinoma, Multiple           |   | X |   | X | X |   | X |   | X | X | X |   |   |   |   | X |   | X |   |   | X |   |   |   |   |   |   |   |   |   |
| Mesentery                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreas                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3 | DAY ON TEST | 0730 | 0537 | 0723 | 0743 | 0774 | 0575 | 0777 | 0777 | 0777 | 0777 | 0777 | 0676 | 0777 | 0777 | 0777 | 0576 | 0677 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | ANIMAL ID | males<br>(cont...) |      |  |
|-------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|--|
|                               | ANIMAL ID   | 0060 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 |           |                    | 0066 |  |
|                               |             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4         | 5                  |      |  |

Fibrous Histiocytoma

X

Salivary Glands

+ +

Stomach, Forestomach  
Squamous Cell Papilloma

+  
X

Stomach, Glandular

+ +

Tooth

+

**CARDIOVASCULAR SYSTEM**

Blood Vessel

+ +

Heart

+ +

**ENDOCRINE SYSTEM**

Adrenal Cortex

+ +

Adenoma  
Subcapsular, Adenoma

X

Adrenal Medulla

+ +

Islets, Pancreatic

+ +

Parathyroid Gland  
Carcinoma

+ + M + M + + + + + M + + M M + + + + M + + + + +

Pituitary Gland

+ +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE | DAY ON TEST | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | males<br>(cont...) |      |      |      |      |      |      |      |
|------------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|------|------|------|------|------|------|------|
|                  |             | 0730      | 0733 | 0732 | 0739 | 0731 | 0734 | 0737 | 0735 | 0738 | 0731 | 0730 | 0731 | 0739 | 0732 | 0732 | 0732 | 0739 | 0734 | 0735 | 0736 |                    | 0737 | 0733 | 0733 | 0733 | 0733 | 0730 | 0733 |
| 100 mg/m3        |             | 0060      | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066               | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 |

Thyroid Gland +

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis +  
 Preputial Gland +  
 Prostate +  
 Seminal Vesicle +  
 Testes +

**HEMATOPOIETIC SYSTEM**

Bone Marrow +  
 Lymph Node Renal, Fibrous Histiocytoma +  
 X  
 Lymph Node, Bronchial M + + M M + + + M + + M M + + + + + + M + + + +  
 Hepatoblastoma, Metastatic, Liver X  
 Hepatocellular Carcinoma, Metastatic, Liver X  
 Lymph Node, Mandibular I + M + M M + + M M M M M M I M + M + + + + M + +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3  | DAY ON TEST | 0<br>7<br>3<br>0 | 0<br>5<br>3<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>3<br>1 | 0<br>4<br>2<br>4 | 0<br>7<br>5<br>4 | 0<br>7<br>4<br>8 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>1<br>1 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>6<br>4<br>5 | 0<br>7<br>2<br>9 | 0<br>7<br>3<br>1 | 0<br>5<br>6<br>7 | 0<br>6<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>1 | 0<br>7<br>7<br>8 | 0<br>7<br>7<br>3 | 0<br>7<br>8<br>0 | males<br>(cont...) |                  |                  |
|--|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
|  | ANIMAL ID   | 0<br>6<br>0<br>1 | 0<br>6<br>0<br>2 | 0<br>6<br>0<br>3 | 0<br>6<br>0<br>4 | 0<br>6<br>0<br>5 | 0<br>6<br>0<br>6 | 0<br>6<br>0<br>7 | 0<br>6<br>0<br>8 | 0<br>6<br>0<br>9 | 0<br>6<br>0<br>0 | 0<br>6<br>0<br>1 | 0<br>6<br>0<br>2 | 0<br>6<br>0<br>3 | 0<br>6<br>0<br>4 | 0<br>6<br>0<br>5 | 0<br>6<br>0<br>6 | 0<br>6<br>0<br>7 | 0<br>6<br>0<br>8 | 0<br>6<br>0<br>9 | 0<br>6<br>0<br>0 | 0<br>6<br>0<br>1 | 0<br>6<br>0<br>2 | 0<br>6<br>0<br>3 |                    | 0<br>6<br>0<br>4 | 0<br>6<br>0<br>5 |
| Lymph Node, Mediastinal<br>Hepatoblastoma, Metastatic, Liver   |             | +                | +                | M                | M                | I                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                  |                  |                  |
| Lymph Node, Mesenteric<br>Fibrous Histiocytoma<br>Hemangioma<br>Hemangiosarcoma<br>Hepatoblastoma, Metastatic, Liver<br>Lymphoma Malignant |             | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                  | +                |                  |
| Spleen<br>Lymphoma Malignant   |             | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                  | +                |                  |
| Thymus<br>Alveolar/Bronchiolar Carcinoma, Metastatic,<br>Lung  |             | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | I                | +                | +                | +                | +                  | +                |                  |
| <b>INTEGUMENTARY SYSTEM</b>  |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Mammary Gland  |             | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                | M                  | M                |                  |
| Skin<br>Fibrous Histiocytoma<br>Subcutaneous Tissue, Histiocytic Sarcoma   |             | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                  | +                |                  |
| <b>MUSCULOSKELETAL SYSTEM</b>  |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |
| Bone   |             | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                  | +                |                  |
| Skeletal Muscle  |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | +                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                    |                  |                  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|                         |             |                        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------|-------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>B6C3F1 MICE MALE</b> | DAY ON TEST | 0730                   | 0537 | 0723 | 0732 | 0421 | 0744 | 0578 | 0771 | 0770 | 0771 | 0772 | 0772 | 0772 | 0645 | 0722 | 0722 | 0731 | 0756 | 0673 | 0733 | 0733 | 0733 | 0730 | 0730 | 0738 | 0730 |
|                         | ANIMAL ID   | 0060                   | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 | 0066 |
| <b>100 mg/m3</b>        |             | 1                      | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    |      |
|                         |             | <b>males (cont...)</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

**NERVOUS SYSTEM**

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx                                      | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Alveolar/Bronchiolar Adenoma                |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   | X |   |   |   |   |
| Alveolar/Bronchiolar Adenoma, Multiple      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar/Bronchiolar Carcinoma              |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X | X | X | X |   | X |   |   |   |
| Alveolar/Bronchiolar Carcinoma, Multiple    | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X | X |   |
| Carcinoma, Metastatic, Harderian Gland      |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatoblastoma, Metastatic, Liver           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Hepatocellular Carcinoma, Metastatic, Liver |   | X |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Harderian Gland      |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pleura                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Trachea                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**SPECIAL SENSES SYSTEM**

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3          | DAY ON TEST | 0730 | 0537 | 0723 | 0731 | 0424 | 0748 | 0531 | 0730 | 0771 | 0779 | 0772 | 0772 | 0645 | 0729 | 0729 | 0731 | 0751 | 0677 | 0733 | 0733 | 0733 | 0730 | 0738 | 0733 | males<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------------|
|  | ANIMAL ID   | 0600 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 | 0666 |                    |
| Carcinoma, Metastatic, Harderian Gland |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                  |
| Harderian Gland                        |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                    |
| Adenoma                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                  |
| Adenoma, Multiple                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
| Carcinoma                              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                  |
| <b>URINARY SYSTEM</b>                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
| Kidney                                 |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                    |
| Hepatoblastoma, Metastatic, Liver      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                  |
| Urinary Bladder                        |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                    |
| <b>SYSTEMIC LESIONS</b>                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
| Multiple Organ                         |             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                    |
| Histiocytic Sarcoma                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |
| Lymphoma Malignant                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3 | DAY ON TEST | 0731  | 0732  | 0733  | 0734  | 0735  | 0736  | 0737  | 0738  | 0739  | 0740  | 0741  | 0742  | 0743  | 0744  | 0745  | 0746  | 0747  | 0748  | 0749  | 0750  | * TOTALS |
|-------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|                               | ANIMAL ID   | 00626 | 00662 | 00662 | 00662 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 | 00663 |          |
|                               |             | 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        |
|                               |             | 3     | 3     | 2     | 3     | 3     | 2     | 2     | 3     | 1     | 3     | 2     | 2     | 3     | 6     | 8     | 7     | 3     | 2     | 2     | 3     | 3        |
|                               |             | 1     | 0     | 9     | 0     | 1     | 9     | 2     | 1     | 3     | 0     | 9     | 9     | 1     | 7     | 0     | 5     | 6     | 3     | 9     | 9     | 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     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6        |
|                               |             | 2     | 2     | 2     | 2     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 3     | 4     | 4     | 4     | 4     | 4     | 4     | 4     | 4        |
|                               |             | 6     | 7     | 8     | 9     | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 0     | 1     | 2     | 3     | 4     | 5     | 6        |

**ALIMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Gallbladder                        | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | M | + | + | +  | 42 |
| Intestine Large, Cecum             | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | +  | 46 |
| Intestine Large, Colon             | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | +  | 48 |
| Intestine Large, Rectum            | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | +  | 45 |
| Intestine Small, Duodenum          | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | +  | 44 |
| Intestine Small, Ileum             | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | +  | 43 |
| Lymphoma Malignant                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |    | 1  |
| Intestine Small, Jejunum           | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | +  | 44 |
| Liver                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |
| Fibrous Histiocytoma               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |
| Hepatoblastoma                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  |
| Hepatocellular Adenoma             |   |   | X | X |   |   |   |   | X | X |   |   | X |   |   |   |   |   |   |   | X |   |    | 12 |
| Hepatocellular Adenoma, Multiple   | X | X |   |   | X | X | X | X |   |   | X |   |   | X |   | X |   | X | X |   |   | X |    | 24 |
| Hepatocellular Carcinoma           |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X | X |   |   |   |    | 8  |
| Hepatocellular Carcinoma, Multiple |   |   |   | X |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |    | 13 |
| Mesentery                          |   |   |   |   |   | + |   |   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |    | 2  |
| Pancreas                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3                | DAY ON TEST                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |              | * TOTALS |
|--|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|----------|
|  | 0731  | 0730  | 0729  | 0728  | 0727  | 0726  | 0725  | 0724  | 0723  | 0722  | 0721  | 0720  | 0719  | 0718  | 0717  | 0716  | 0715  | 0714  | 0713  | 0712  | 0711  | 0710  |              |          |
| ANIMAL ID                                    |   | 00626 | 00627 | 00628 | 00629 | 00630 | 00631 | 00632 | 00633 | 00634 | 00635 | 00636 | 00637 | 00638 | 00639 | 00640 | 00641 | 00642 | 00643 | 00644 | 00645 | 00646 | 00647        |          |
| Fibrous Histiocytoma                         |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1            |          |
| Salivary Glands                              | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50           |          |
| Stomach, Forestomach Squamous Cell Papilloma | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50<br>1      |          |
| Stomach, Glandular                           | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50           |          |
| Tooth  | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5            |          |
| <b>CARDIOVASCULAR SYSTEM</b>                 |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |              |          |
| Blood Vessel                                 | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50           |          |
| Heart  | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50           |          |
| <b>ENDOCRINE SYSTEM</b>                      |   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |              |          |
| Adrenal Cortex Adenoma Subcapsular, Adenoma  | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 49<br>1<br>6 |          |
| Adrenal Medulla                              | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 49           |          |
| Islets, Pancreatic                           | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 50           |          |
| Parathyroid Gland Carcinoma                  | M M + + M M + + M + + + M M + + + M + + M M |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 34<br>1      |          |
| Pituitary Gland                              | +   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 48           |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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





Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3                                 | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |         |         |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------|---------|
|   | 0731        | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  |          | 0731    |         |
| ANIMAL ID   | 00626       | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626 | 00626    |         |         |
| Lymph Node, Mediastinal<br>Hepatoblastoma, Metastatic, Liver  | M           | M     | M     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | A     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +        | 40<br>1 |         |
| Lymph Node, Mesenteric<br>Fibrous Histiocytoma                | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | A     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 48<br>1 |         |
| Hemangioma  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1       |         |
| Hemangiosarcoma   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |          | 2       |         |
| Hepatoblastoma, Metastatic, Liver                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1       |         |
| Lymphoma Malignant  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |          | 1       |         |
| Spleen<br>Lymphoma Malignant                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | X     | +     | +     | +     | +     | +     | +     | +     | +     | +     | X     | +     | +     | +        | 50<br>2 |         |
| Thymus<br>Alveolar/Bronchiolar Carcinoma, Metastatic,<br>Lung | +           | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | I     | +     | +     | +     | +     | +     | X        | 46<br>1 |         |
| <b>INTEGUMENTARY SYSTEM</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |         |         |
| Mammary Gland   | M           | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M     | M        | M       | 0       |
| Skin<br>Fibrous Histiocytoma                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +       | 50<br>1 |
| Subcutaneous Tissue, Histiocytic Sarcoma                      |             |       | X     |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |          | 1       |         |
| <b>MUSCULOSKELETAL SYSTEM</b>                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |         |         |
| Bone  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50      |         |
| Skeletal Muscle   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1       |         |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE MALE<br>100 mg/m3          | 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 | * TOTALS |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|----------|
|  | ANIMAL ID   | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7  | 7 |          |
|  |             | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 3 | 6 | 8 | 7 | 3 | 2 | 2 | 3 | 3 | 2 | 2  | 3 |          |
|  |             | 1 | 0 | 9 | 0 | 1 | 9 | 1 | 3 | 0 | 9 | 9 | 1 | 7 | 0 | 5 | 0 | 9 | 9 | 0 | 9 | 1 | 1 | 2  | 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 |          |
|  |             | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6  | 6 |          |
|  |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4  | 5 |          |
|  |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8  | 9 |          |
| Carcinoma, Metastatic, Harderian Gland |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |          |
| Harderian Gland                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 50 |   |          |
| Adenoma                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  |   |          |
| Adenoma, Multiple                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |          |
| Carcinoma                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |          |
| <b>URINARY SYSTEM</b>                  |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |          |
| Kidney                                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 50 |   |          |
| Hepatoblastoma, Metastatic, Liver      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |          |
| Urinary Bladder                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 50 |   |          |
| <b>SYSTEMIC LESIONS</b>                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |          |
| Multiple Organ                         |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 50 |   |          |
| Histiocytic Sarcoma                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |   |          |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |   |          |

\*\*\* END OF MALE DATA \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|                           |                |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                              |      |
|---------------------------|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------------|------|
| <b>B6C3F1 MICE FEMALE</b> | DAY ON TEST    | 0733      | 0573 | 0759 | 0553 | 0773 | 0773 | 0773 | 0773 | 0572 | 0773 | 0773 | 0773 | 0661 | 0773 | 0773 | 0773 | 0474 | 0769 | 0673 | 0773 | 0773 | 0676 | <b>females<br/>(cont...)</b> |      |
|                           | <b>Control</b> | ANIMAL ID | 0010 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 | 0011 |                              | 0011 |
|                           |                |           | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 |                              | 5678 |

**ALIMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Gallbladder<br>Lymphoma Malignant  | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A |
| Intestine Large, Cecum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum  | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
| Intestine Small, Duodenum<br>Histiocytic Sarcoma<br>Lymphoma Malignant   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A |
| Intestine Small, Ileum<br>Lymphoma Malignant   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A |
| Intestine Small, Jejunum<br>Lymphoma Malignant   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A |
| Liver<br>Hepatoblastoma<br>Hepatocellular Adenoma<br>Hepatocellular Adenoma, Multiple<br>Hepatocellular Carcinoma<br>Histiocytic Sarcoma<br>Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   | X |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
|  |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE |  | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | females<br>(cont...)  |                       |                       |                       |
|--------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Control            |  | 0<br>7<br>3<br>3      | 0<br>5<br>7<br>5      | 0<br>7<br>3<br>1      | 0<br>5<br>9<br>7      | 0<br>5<br>5<br>0      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>5<br>2<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>6<br>3<br>1      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>4<br>8<br>1      | 0<br>7<br>3<br>2      | 0<br>6<br>9<br>4      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>6<br>7<br>5      |                       |                       |                       |                       |                       |                       |
| ANIMAL ID          |  | 0<br>0<br>1<br>0<br>1 | 0<br>0<br>0<br>0<br>2 | 0<br>0<br>1<br>0<br>3 | 0<br>0<br>1<br>0<br>4 | 0<br>0<br>1<br>0<br>5 | 0<br>0<br>1<br>0<br>6 | 0<br>0<br>1<br>0<br>7 | 0<br>0<br>1<br>0<br>8 | 0<br>0<br>1<br>0<br>9 | 0<br>0<br>1<br>1<br>0 | 0<br>0<br>1<br>1<br>1 | 0<br>0<br>1<br>1<br>2 | 0<br>0<br>1<br>1<br>3 | 0<br>0<br>1<br>1<br>4 | 0<br>0<br>1<br>1<br>5 | 0<br>0<br>1<br>1<br>6 | 0<br>0<br>1<br>1<br>7 | 0<br>0<br>1<br>1<br>8 | 0<br>0<br>1<br>1<br>9 | 0<br>0<br>1<br>1<br>0 | 0<br>0<br>1<br>1<br>1 | 0<br>0<br>1<br>1<br>2 | 0<br>0<br>1<br>1<br>3 | 0<br>0<br>1<br>1<br>4 | 0<br>0<br>2<br>2<br>5 | 0<br>0<br>2<br>2<br>6 | 0<br>0<br>2<br>2<br>7 | 0<br>0<br>2<br>2<br>8 | 0<br>0<br>2<br>2<br>9 |

|                         |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
|-------------------------|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| Mesentery               |   |  |   |  | + |  |   |  |   |  |   |  | + |  |   |  | + |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Lymphoma Malignant      |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Pancreas                | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  |
| Histiocytic Sarcoma     |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Lymphoma Malignant      |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Salivary Glands         | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  |   |  |
| Histiocytic Sarcoma     |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Lymphoma Malignant      |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Stomach, Forestomach    | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  |   |  |
| Lymphoma Malignant      |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Squamous Cell Papilloma |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |
| Stomach, Glandular      | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | A |  | + |  |   |  |
| Lymphoma Malignant      |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |

**CARDIOVASCULAR SYSTEM**

|  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|--|--|
| Blood Vessel   | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  |  |  |
| Aorta, Hemangiosarcoma                                       |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Lung                  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Lymph Node, Bronchial |   |  |   |  |   |  |   |  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Spleen                |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
| Heart  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  | + |  |  |  |
| Histiocytic Sarcoma  |   |  |   |  | X |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |
| Histiocytic Sarcoma, Metastatic, Liver                       |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |   |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>Control | DAY ON TEST | 0733 | 0573 | 0757 | 0557 | 0777 | 0777 | 0777 | 0777 | 0575 | 0777 | 0777 | 0777 | 0676 | 0777 | 0777 | 0777 | 0474 | 0776 | 0677 | 0777 | 0776 | 0676 | females<br>(cont...) |
|-------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|                               | ANIMAL ID   | 0010 | 0001 | 0001 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0000 | 0000 | 0000 | 0000 | 0000 |                      |

Lymphoma Malignant

X

X

**ENDOCRINE SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant                        |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pheochromocytoma Benign                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma, Metastatic, Pancreas |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Histiocytic Sarcoma, Metastatic, Spleen   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant, Metastatic, Pancreas  |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland                         | + | M | + | + | M | + | + | M | + | + | + | M | M | + | M | M | + | M | M | + | + | + | M |
| Adenoma                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pituitary Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | M |
| Pars Distalis, Adenoma                    |   |   | X |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   | X |   |   |
| Pars Distalis, Carcinoma                  | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |
| Thyroid Gland                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant                        |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |
| C-cell, Carcinoma                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |

**GENERAL BODY SYSTEM**

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

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  | females<br>(cont...) |
|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|----------------------|
|                    | 0<br>7<br>3<br>3 | 0<br>5<br>7<br>5 | 0<br>7<br>3<br>1 | 0<br>5<br>9<br>7 | 0<br>5<br>5<br>0 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>5<br>2<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>1 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>3 | 0<br>4<br>8<br>2 | 0<br>7<br>3<br>1 | 0<br>6<br>9<br>4 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>6<br>4<br>5 |  |                      |
| Control            | 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                | 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                | 1                |  |                      |
|                    | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 1                | 2                | 2                | 2                | 2                |  |                      |
|                    | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                | 9                | 0                | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                | 9                | 0                | 1                | 2                | 3                |  |                      |

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | M | + | + | + | + |
| Ovary                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cystadenoma                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Granulosa Cell Tumor Benign            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Histiocytic Sarcoma                    |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Periovarian Tissue, Lymphoma Malignant |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Uterus                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemangiosarcoma                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Histiocytic Sarcoma                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Polyp Stromal                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**HEMATOPOIETIC SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
| Histiocytic Sarcoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                   |   |   | + |   |   | + |   |   |   |   |   |   |   | + |   |   |   |   |   | + |   | + |   |   |   |
| Histiocytic Sarcoma          |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Lymphoma Malignant    |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inguinal, Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Hemangiosarcoma      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Histiocytic Sarcoma  |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>Control               | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |  |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|--|
|   | 0733        | 0573 | 0773 | 0595 | 0573 | 0773 | 0773 | 0773 | 0773 | 0572 | 0773 | 0773 | 0773 | 0673 | 0773 | 0773 | 0773 | 0474 | 0767 | 0677 | 0773 | 0773 | 0677 | 0766 |      |                      |  |
| ANIMAL ID                                   | 0010        | 0011 | 0012 | 0013 | 0014 | 0015 | 0016 | 0017 | 0018 | 0019 | 0020 | 0021 | 0022 | 0023 | 0024 | 0025 | 0026 | 0027 | 0028 | 0029 | 0030 | 0031 | 0032 | 0033 | 0034 | 0035                 |  |
| Lumbar, Lymphoma Malignant                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Pancreatic, Histiocytic Sarcoma             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |  |
| Pancreatic, Lymphoma Malignant              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Renal, Histiocytic Sarcoma                  |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |  |
| Renal, Lymphoma Malignant                   |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Lymph Node, Bronchial Histiocytic Sarcoma   | +           | +    | +    | M    | +    | M    | +    | I    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    |      |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Lymph Node, Mandibular Histiocytic Sarcoma  | M           | +    | M    | M    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | M    |      |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Lymph Node, Mediastinal Histiocytic Sarcoma | +           | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | M    | M    |      |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Lymph Node, Mesenteric Hemangioma           | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | +    |                      |  |
| Histiocytic Sarcoma                         |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Spleen Histiocytic Sarcoma                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |
| Thymus Histiocytic Sarcoma                  | +           | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |                      |  |
| Lymphoma Malignant                          |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                    |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  | females<br>(cont...) |
|--------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|----------------------|
|                    | 0733        | 0573 | 0773 | 0553 | 0573 | 0773 | 0773 | 0773 | 0773 | 0573 | 0773 | 0773 | 0773 | 0673 | 0773 | 0773 | 0773 | 0473 | 0773 | 0673 | 0773 | 0773 | 0773 | 0673 |  |                      |
| Control            | 0010        | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 | 0010 |  |                      |
|                    | 1100        | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |  |                      |
|                    | 2200        | 3300 | 4400 | 5500 | 6600 | 7700 | 8800 | 9900 | 0000 | 1100 | 2200 | 3300 | 4400 | 5500 | 6600 | 7700 | 8800 | 9900 | 0000 | 1100 | 2200 | 3300 | 4400 | 5500 |  |                      |

**INTEGUMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland<br>Lymphoma Malignant, Metastatic, Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

**MUSCULOSKELETAL SYSTEM**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**NERVOUS SYSTEM**

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain<br>Lymphoma Malignant | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Peripheral Nerve            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**RESPIRATORY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx<br>Lymphoma Malignant             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lung<br>Alveolar/Bronchiolar Adenoma     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar/Bronchiolar Carcinoma           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Alveolar/Bronchiolar Carcinoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>Control        | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|
|                                      | 0<br>7<br>3<br>3 | 0<br>5<br>7<br>5 | 0<br>7<br>3<br>1 | 0<br>5<br>9<br>7 | 0<br>5<br>5<br>0 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>5<br>2<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>1 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>3 | 0<br>4<br>8<br>1 | 0<br>7<br>3<br>2 | 0<br>6<br>9<br>4 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>6<br>7<br>5 |           |                      |
| Carcinoma, Metastatic, Thyroid Gland |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X         |                      |
| Histiocytic Sarcoma                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Lymphoma Malignant                   |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Nose                                 | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                      |
| Trachea                              | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                      |
| Lymphoma Malignant                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| <b>SPECIAL SENSES SYSTEM</b>         |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Eye                                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +         |                      |
| Lymphoma Malignant                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Harderian Gland                      | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                      |
| Adenoma                              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Carcinoma                            |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |           |                      |
| Lymphoma Malignant                   |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| <b>URINARY SYSTEM</b>                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Kidney                               | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | A                | +                | +                | +                | +         |                      |
| Histiocytic Sarcoma                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Lymphoma Malignant                   |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Artery, Histiocytic Sarcoma          |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Urinary Bladder                      | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +         |                      |
| Histiocytic Sarcoma                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| Lymphoma Malignant                   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | X                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |
| <b>SYSTEMIC LESIONS</b>              |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                      |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br><br>Control | 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   | 7 | 5 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 6 |                      |  |
|                                   |             | 3 | 7 | 3 | 9 | 5 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 8 | 3 | 9 | 3 | 3 | 3 | 4 |                      |  |
|                                   |             | 3 | 5 | 1 | 7 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | 2 | 1 | 2 | 4 | 3 | 2 | 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 |                      |  |
|                                   |             | 1 | 1 | 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 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |                      |  |
|                                   |             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5                    |  |
| Multiple Organ                    |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |  |
| Histiocytic Sarcoma               |             |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |  |
| Lymphoma Malignant                |             |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |                      |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|
|                    | 0731        | 0733  | 0733  | 0732  | 0733  | 0737  | 0733  | 0733  | 0734  | 0733  | 0733  | 0733  | 0735  | 0733  | 0733  | 0733  | 0733  | 0736  | 0737  | 0738  | 0733  | 0733  | 0732  | 0738  |          | 0737  | 0733  |
| Control            | 00126       | 00127 | 00128 | 00129 | 00130 | 00131 | 00132 | 00133 | 00134 | 00135 | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150    | 00151 | 00152 |

**ALIMENTARY SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| Intestine Large, Cecum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Duodenum        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Intestine Small, Ileum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Intestine Small, Jejunum         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Liver                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatoblastoma                   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Hepatocellular Adenoma           |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | 7  |
| Hepatocellular Adenoma, Multiple |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Hepatocellular Carcinoma         |   |   |   | X |   |   | X |   |   |   |   | X | X |   | X |   | X |   |   |   |   |   |   |   |   |   |   | 7  |
| Histiocytic Sarcoma              |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   | 3  |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X |   |   |   |   |   |   |   |   | X |   |   |   | 6  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|--------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|                    | 0731        | 0733 | 0733 | 0721 | 0733 | 0737 | 0773 | 0773 | 0762 | 0773 | 0773 | 0773 | 0733 | 0773 | 0773 | 0773 | 0773 | 0766 | 0773 | 0766 | 0773 | 0773 | 0766 | 0773 |          |
| Control            | 001         | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  |          |
|                    | 002         | 002  | 002  | 002  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 003  | 004  | 004  | 004  | 004  | 004  | 004  | 004  |          |
|                    | 006         | 007  | 008  | 009  | 000  | 001  | 002  | 003  | 004  | 005  | 006  | 007  | 008  | 009  | 000  | 001  | 002  | 003  | 004  | 005  | 006  | 007  | 008  | 009  |          |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mesentery               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymphoma Malignant      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pancreas                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Histiocytic Sarcoma     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymphoma Malignant      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salivary Glands         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Histiocytic Sarcoma     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymphoma Malignant      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Forestomach    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymphoma Malignant      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Squamous Cell Papilloma |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Glandular      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lymphoma Malignant      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**CARDIOVASCULAR SYSTEM**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aorta, Hemangiosarcoma                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Lung                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Lymph Node, Bronchial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aorta, Lymphoma Malignant, Metastatic, Spleen                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Heart  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Histiocytic Sarcoma  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Histiocytic Sarcoma, Metastatic, Liver                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>Control             | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|   | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>7<br>2<br>1      | 0<br>7<br>3<br>1      | 0<br>6<br>7<br>3      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>2      | 0<br>6<br>4<br>7      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>3<br>5<br>3      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>3      | 0<br>6<br>3<br>3      | 0<br>7<br>1<br>3      | 0<br>6<br>8<br>3      | 0<br>7<br>3<br>3      | 0<br>6<br>3<br>2      | 0<br>7<br>3<br>8      | 0<br>6<br>2<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      |                       |          |
|   | ANIMAL ID             |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
|   | 0<br>0<br>1<br>2<br>6 | 0<br>0<br>1<br>2<br>7 | 0<br>0<br>1<br>2<br>8 | 0<br>0<br>1<br>2<br>9 | 0<br>0<br>1<br>3<br>0 | 0<br>0<br>1<br>3<br>1 | 0<br>0<br>1<br>3<br>2 | 0<br>0<br>1<br>3<br>3 | 0<br>0<br>1<br>3<br>4 | 0<br>0<br>1<br>3<br>5 | 0<br>0<br>1<br>3<br>6 | 0<br>0<br>1<br>3<br>7 | 0<br>0<br>1<br>3<br>8 | 0<br>0<br>1<br>3<br>9 | 0<br>0<br>1<br>4<br>0 | 0<br>0<br>1<br>4<br>1 | 0<br>0<br>1<br>4<br>2 | 0<br>0<br>1<br>4<br>3 | 0<br>0<br>1<br>4<br>4 | 0<br>0<br>1<br>4<br>5 | 0<br>0<br>1<br>4<br>6 | 0<br>0<br>1<br>4<br>7 | 0<br>0<br>1<br>4<br>8 | 0<br>0<br>1<br>4<br>9 |          |
| Lymphoma Malignant                        |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 4                     |          |
| <b>ENDOCRINE SYSTEM</b>                   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Adrenal Cortex                            | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |          |
| Histiocytic Sarcoma                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       | 1                     |          |
| Lymphoma Malignant                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |          |
| Adrenal Medulla                           | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |          |
| Histiocytic Sarcoma                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       | 1                     |          |
| Pheochromocytoma Benign                   |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |          |
| Islets, Pancreatic                        | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |          |
| Histiocytic Sarcoma, Metastatic, Pancreas |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       | 1                     |          |
| Histiocytic Sarcoma, Metastatic, Spleen   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| Lymphoma Malignant, Metastatic, Pancreas  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| Parathyroid Gland                         | +                     | +                     | +                     | M                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | +                     | +                     | +                     | +                     | +                     | M                     | +                     | 35                    |          |
| Adenoma                                   |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| Pituitary Gland                           | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 48                    |          |
| Pars Distalis, Adenoma                    |                       |                       |                       | X                     |                       |                       |                       |                       | X                     |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       |                       |                       |                       | 8                     |          |
| Pars Distalis, Carcinoma                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 3                     |          |
| Thyroid Gland                             | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |          |
| Lymphoma Malignant                        |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| C-cell, Carcinoma                         |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |
| <b>GENERAL BODY SYSTEM</b>                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |          |
| Tissue NOS                                |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|--------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|                    | 0731        | 0733 | 0733 | 0721 | 0733 | 0737 | 0731 | 0732 | 0737 | 0732 | 0731 | 0733 | 0735 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 |          |
| Control            | 0016        | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 46       |

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 46 |
| Ovary                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cystadenoma                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Granulosa Cell Tumor Benign            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |
| Histiocytic Sarcoma                    |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 3  |
| Lymphoma Malignant                     |   |   |   |   |   |   |   |   |   |   | X | X |   |   | X |   |   |   |   |   |   |   |   |   | 4  |
| Periovarian Tissue, Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Uterus                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemangiosarcoma                        |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Histiocytic Sarcoma                    |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant                     |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Polyp Stromal                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   | 1  |

**HEMATOPOIETIC SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Histiocytic Sarcoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | 1  |
| Lymphoma Malignant           |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Lymph Node                   |   |   |   |   |   |   |   |   |   | + | + |   |   |   |   |   |   |   |   |   |   | + | + |   | 11 |
| Histiocytic Sarcoma          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Axillary, Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Iliac, Lymphoma Malignant    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Inguinal, Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lumbar, Hemangiosarcoma      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 1  |
| Lumbar, Histiocytic Sarcoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>Control               | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|   | 0731        | 0733 | 0733 | 0732 | 0733 | 0763 | 0773 | 0776 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 |          | 0777 | 0777 |
| ANIMAL ID                                   | 001         | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001  | 001      | 001  |      |
| Lumbar, Lymphoma Malignant                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 2    |
| Pancreatic, Histiocytic Sarcoma             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1    |
| Pancreatic, Lymphoma Malignant              |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 4    |
| Renal, Histiocytic Sarcoma                  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1    |
| Renal, Lymphoma Malignant                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 2    |
| Lymph Node, Bronchial Histiocytic Sarcoma   | +           | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 44   |
| Lymphoma Malignant                          |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 3    |
| Lymph Node, Mandibular Histiocytic Sarcoma  | M           | +    | M    | +    | M    | +    | I    | I    | +    | M    | +    | +    | M    | M    | +    | +    | +    | M    | +    | +    | +        | +    | 35   |
| Lymphoma Malignant                          |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 3    |
| Lymph Node, Mediastinal Histiocytic Sarcoma | +           | M    | M    | +    | +    | +    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | I    | M    | M    | +        | +    | 40   |
| Lymphoma Malignant                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 2    |
| Lymph Node, Mesenteric Hemangioma           | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 49   |
| Histiocytic Sarcoma                         |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 1    |
| Lymphoma Malignant                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 2    |
| Spleen Histiocytic Sarcoma                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 50   |
| Lymphoma Malignant                          |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 3    |
| Thymus Histiocytic Sarcoma                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | 48   |
| Lymphoma Malignant                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      | 3    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|                    | 0731        | 0733  | 0733  | 0732  | 0733  | 0737  | 0731  | 0732  | 0737  | 0732  | 0732  | 0731  | 0733  | 0735  | 0733  | 0733  | 0733  | 0733  | 0736  | 0737  | 0738  | 0733  | 0732  | 0737  |          |
| Control            | 00126       | 00127 | 00128 | 00129 | 00130 | 00131 | 00132 | 00133 | 00134 | 00135 | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150    |

**INTEGUMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant, Metastatic, Spleen |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Skin                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

**MUSCULOSKELETAL SYSTEM**

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |

**NERVOUS SYSTEM**

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   | X |   |   |   |   |   |   |   | 3  |
| Peripheral Nerve   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Spinal Cord        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

**RESPIRATORY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Lung                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Alveolar/Bronchiolar Adenoma             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   | 4  |
| Alveolar/Bronchiolar Carcinoma           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   | 3  |
| Alveolar/Bronchiolar Carcinoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE                   | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |  |
|--------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|--|
|                                      | 0731        | 0733  | 0733  | 0732  | 0733  | 0737  | 0731  | 0732  | 0734  | 0735  | 0736  | 0737  | 0733  | 0735  | 0733  | 0733  | 0733  | 0733  | 0736  | 0737  | 0738  | 0733  | 0732  | 0737  |          | 0737 |  |
| Control                              | ANIMAL ID   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |  |
|                                      | 00126       | 00127 | 00128 | 00129 | 00130 | 00131 | 00132 | 00133 | 00134 | 00135 | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150    |      |  |
| Carcinoma, Metastatic, Thyroid Gland |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |  |
| Histiocytic Sarcoma                  |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |          | 3    |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       |       | X     | X     |       |       | X     |       |       |       |       |       |       |       |       |          | 5    |  |
| Nose                                 | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |  |
| Trachea                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 49   |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |          | 1    |  |
| <b>SPECIAL SENSES SYSTEM</b>         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |  |
| Eye                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 49   |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |  |
| Harderian Gland                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |  |
| Adenoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |          | 1    |  |
| Carcinoma                            |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | X     |       |          | 3    |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2    |  |
| <b>URINARY SYSTEM</b>                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |  |
| Kidney                               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 49   |  |
| Histiocytic Sarcoma                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       | X     | X     |       |       | X     |       |       |       |       |       |       |       | X     |       |          | 6    |  |
| Artery, Histiocytic Sarcoma          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |          | 1    |  |
| Urinary Bladder                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |  |
| Histiocytic Sarcoma                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |  |
| Lymphoma Malignant                   |             |       |       |       |       |       |       |       |       |       |       | X     | X     |       |       |       |       |       |       |       |       |       |       |       |          | 3    |  |
| <b>SYSTEMIC LESIONS</b>              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



**Experiment Number:** 20523 - 04  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
Metal Working Fluids: Trim VX  
**CAS Number:** TRIMVX

**Date Report Requested:** 02/02/2015  
**Time Report Requested:** 13:50:12  
**First Dose M/F:** 08/03/09 / 08/03/09  
**Lab:** BNW

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                              |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------------------|------|------|------|
| <b>B6C3F1 MICE FEMALE</b><br><br><b>10 mg/m3</b> | DAY ON TEST | 0607 | 0772 | 0774 | 0772 | 0771 | 0771 | 0772 | 0773 | 0773 | 0747 | 0671 | 0763 | 0774 | 0575 | 0667 | 0777 | 0777 | 0773 | 0773 | 0733 | 0733 | 0588 | 0732 | <b>females<br/>(cont...)</b> |      |      |      |
|  | ANIMAL ID   | 0030 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0001 | 0002 | 0002 |                              | 0003 | 0004 | 0005 |
|  |             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    |                              | 4    | 5    |      |

**ALIMENTARY SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Gallbladder                      | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Cecum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Colon           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Large, Rectum          | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Intestine Small, Duodenum        | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Ileum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Jejunum         | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Liver                            | + | + | + | + | + | + | + | X | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hepatocellular Adenoma           |   |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   | X |   | X |   | X |   |   |   |
| Hepatocellular Adenoma, Multiple |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Hepatocellular Carcinoma         |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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



**Experiment Number:** 20523 - 04  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
 Metal Working Fluids: Trim VX  
**CAS Number:** TRIMVX

**Date Report Requested:** 02/02/2015  
**Time Report Requested:** 13:50:12  
**First Dose M/F:** 08/03/09 / 08/03/09  
**Lab:** BNW

|                           |             |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                              |                  |
|---------------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------------------|------------------|
| <b>B6C3F1 MICE FEMALE</b> | DAY ON TEST | 0<br>6<br>0<br>7 | 0<br>7<br>3<br>2 | 0<br>7<br>2<br>4 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>3 | 0<br>4<br>7<br>9 | 0<br>6<br>1<br>9 | 0<br>7<br>3<br>2 | 0<br>6<br>7<br>5 | 0<br>7<br>3<br>7 | 0<br>6<br>9<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>5<br>8<br>0 | 0<br>7<br>3<br>2 | <b>females<br/>(cont...)</b> |                  |
|                           | ANIMAL ID   | 0<br>3<br>0<br>1 | 0<br>3<br>0<br>2 | 0<br>3<br>0<br>3 | 0<br>3<br>0<br>4 | 0<br>3<br>0<br>5 | 0<br>3<br>0<br>6 | 0<br>3<br>0<br>7 | 0<br>3<br>0<br>8 | 0<br>3<br>0<br>9 | 0<br>3<br>0<br>0 | 0<br>3<br>0<br>1 | 0<br>3<br>0<br>2 | 0<br>3<br>0<br>3 | 0<br>3<br>0<br>4 | 0<br>3<br>0<br>5 | 0<br>3<br>0<br>6 | 0<br>3<br>0<br>7 | 0<br>3<br>0<br>8 | 0<br>3<br>0<br>9 | 0<br>3<br>0<br>0 | 0<br>3<br>0<br>1 | 0<br>3<br>0<br>2 |                              | 0<br>3<br>0<br>3 |

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**ENDOCRINE SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Histiocytic Sarcoma                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Adrenal Medulla                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pheochromocytoma Benign                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Pheochromocytoma Malignant              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Islets, Pancreatic                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Histiocytic Sarcoma, Metastatic, Spleen |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Lymphoma Malignant, Metastatic, Spleen  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Parathyroid Gland                       | + | + | M | + | + | M | M | M | + | + | + | + | M | + | + | + | M | + | M | M | M | + | M | + |  |
| Pituitary Gland                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pars Distalis, Adenoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Thyroid Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | M | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|                    |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B6C3F1 MICE FEMALE | DAY ON TEST | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 |   |
|                    |             | 0 | 3 | 2 | 3 | 3 | 3 | 3 | 7 | 1 | 3 | 4 | 3 | 7 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 |   |
|                    |             | 7 | 2 | 4 | 2 | 1 | 1 | 2 | 3 | 9 | 9 | 2 | 0 | 2 | 5 | 7 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 0 | 2 |
| 10 mg/m3           | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |
|                    |             | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
|                    |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |

females (cont...)

Histiocytic Sarcoma

Ovary

Cystadenoma

Histiocytic Sarcoma

Lymphoma Malignant

Periovarian Tissue, Lymphoma Malignant

Uterus

Hemangioma

Hemangiosarcoma

Histiocytic Sarcoma

Polyp Stromal

+ + + + + + + + + + + + + + + + I + + + + + +

X X

X

X

+ + + + + X + + + + + + + + + + + + + + + +

X

X

HEMATOPOIETIC SYSTEM

Bone Marrow

Histiocytic Sarcoma

Lymphoma Malignant

+ +

X

X

Lymph Node

Lymphoma Malignant

Axillary, Schwannoma Malignant, Metastatic, Skin

Deep Cervical, Lymphoma Malignant

Lumbar, Histiocytic Sarcoma

Lumbar, Lymphoma Malignant

Pancreatic, Histiocytic Sarcoma

Pancreatic, Lymphoma Malignant

Renal, Histiocytic Sarcoma

+

+

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>10 mg/m3 | 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 |
|                                | 6           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 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           | 3 | 2 | 3 | 3 | 3 | 3 | 7 | 1 | 3 | 4 | 3 | 7 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 8                    | 3 |
|                                | 7           | 2 | 4 | 2 | 1 | 1 | 2 | 3 | 9 | 9 | 2 | 0 | 2 | 5 | 7 | 2 | 2 | 2 | 2 | 3 | 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 | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3                    | 3 |
|                                | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2                    | 2 |
|                                | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1                    | 2 |

Renal, Lymphoma Malignant

Lymph Node, Bronchial  
Carcinoma, Metastatic, Mammary Gland  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + I + + + + + + + + + I + + + + + M + + + + + +  
 X  
 X  
 X

Lymph Node, Mandibular  
Histiocytic Sarcoma  
Lymphoma Malignant

I + + + + + + + + + M + + + + + M I M + M + + +  
 X  
 X

Lymph Node, Mediastinal  
Histiocytic Sarcoma  
Lymphoma Malignant  
Schwannoma Malignant, Metastatic, Skin

+ + + + + + M + + + + + + + + + I + + + M + I + +  
 X  
 X  
 X

Lymph Node, Mesenteric  
Histiocytic Sarcoma  
Lymphoma Malignant

+  
 X  
 X

Spleen  
Hemangiosarcoma  
Histiocytic Sarcoma  
Lymphoma Malignant

+  
 X  
 X  
 X

Thymus  
Histiocytic Sarcoma  
Lymphoma Malignant

I + + + + + + + + + + + + + + + + + + I + + +  
 X  
 X

INTEGUMENTARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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





Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|                    |   | 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 |                      |
| B6C3F1 MICE FEMALE | ANIMAL ID   | 6           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |                      |
|                    |   | 0           | 3 | 2 | 3 | 3 | 3 | 3 | 7 | 1 | 3 | 4 | 3 | 7 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |                      |
| 10 mg/m3           |   | 7           | 2 | 4 | 2 | 1 | 1 | 2 | 3 | 9 | 9 | 2 | 0 | 2 | 5 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 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 |                      |
|                    |   | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |                      |
|                    |   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |                      |
|                    |   | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5                    |
| Larynx             |   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |
| Lung               |   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |
|                    | Alveolar/Bronchiolar Adenoma                            |             |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   | X |   | X |   |   |   |                      |
|                    | Alveolar/Bronchiolar Carcinoma                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |
|                    | Carcinoma, Metastatic, Mammary Gland                    |             |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |                      |
|                    | Hepatocellular Carcinoma, Metastatic, Liver             | X           |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |
|                    | Histiocytic Sarcoma                                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |                      |
|                    | Lymphoma Malignant                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |                      |
|                    | Pheochromocytoma Malignant, Metastatic, Adrenal Medulla |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |                      |
| Nose               |   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |
|                    | Lymphoma Malignant                                      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                      |
| Trachea            |   | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |                      |

**SPECIAL SENSES SYSTEM**

|                 |                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye             |                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland |                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                 | Adenoma            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |
|                 | Carcinoma          |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
|                 | Lymphoma Malignant |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**URINARY SYSTEM**

|        |                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney |                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|        | Carcinoma, Metastatic, Mammary Gland |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |
|        | Histiocytic Sarcoma                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>B6C3F1 MICE FEMALE</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 | 0 |   |   |   |
|                           |             | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 6 | 7 | 6 | 7 | 6 | 7 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |
|                           |             | 0 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 7 | 1 | 3 | 4 | 3 | 7 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| <b>10 mg/m3</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 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
|                           |             | 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 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|                           |             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

females  
(cont...)

Lymphoma Malignant  
Pheochromocytoma Malignant, Metastatic,  
Adrenal Medulla

X

X

Urethra

Urinary Bladder

+ +

Histiocytic Sarcoma  
Lymphoma Malignant

X

**SYSTEMIC LESIONS**

Multiple Organ

+ +

Histiocytic Sarcoma  
Lymphoma Malignant

X

X

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|                    | 0732        | 0732  | 0733  | 0733  | 0732  | 0731  | 0735  | 0732  | 0731  | 0731  | 0738  | 0733  | 0733  | 0733  | 0733  | 0732  | 0733  | 0733  | 0732  | 0739  | 0732  | 0737  | 0734  | 0738  | 0732  |          |
| 10 mg/m3           | 00326       | 00327 | 00328 | 00329 | 00330 | 00331 | 00332 | 00333 | 00334 | 00335 | 00336 | 00337 | 00338 | 00339 | 00340 | 00341 | 00342 | 00343 | 00344 | 00345 | 00346 | 00347 | 00348 | 00349 | 00350 | 50       |

**ALIMENTARY SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Gallbladder                      | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | A | + | 46 |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Lymphoma Malignant               |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Intestine Large, Cecum           | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Histiocytic Sarcoma              |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant               |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Intestine Large, Colon           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma              |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Intestine Large, Rectum          | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Duodenum        | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 46 |
| Histiocytic Sarcoma              |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Intestine Small, Ileum           | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 47 |
| Histiocytic Sarcoma              |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant               |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 2  |
| Intestine Small, Jejunum         | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 45 |
| Liver                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma           | X |   |   | X |   | X |   |   |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   |   | 11 |
| Hepatocellular Adenoma, Multiple |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 4  |
| Hepatocellular Carcinoma         |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE                 | 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 |   |          |    |
|                                    | 7           | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 5 |          | 7  |
| 10 mg/m3                           | 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  |
| 3                                  | 3           | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |          | 3  |
| 2                                  | 2           | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5        | 2  |
| 6                                  | 7           | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0        |    |
| Hepatocellular Carcinoma, Multiple |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 3  |
| Histiocytic Sarcoma                |             |   | X |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |          | 4  |
| Ito Cell Tumor Benign              |             |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1  |
| Lymphoma Malignant                 |             | X |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   | X | X |   |   |   |          | 6  |
| Mesentery                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 10 |
| Histiocytic Sarcoma                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2  |
| Pancreas                           | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 50 |
| Histiocytic Sarcoma                |             |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |          | 2  |
| Lymphoma Malignant                 |             |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X | X |   |   |   |   |          | 3  |
| Salivary Glands                    | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 50 |
| Histiocytic Sarcoma                |             |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2  |
| Lymphoma Malignant                 |             | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X | X | X |   |   |   |          | 5  |
| Stomach, Forestomach               | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 50 |
| Histiocytic Sarcoma                |             |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |          | 3  |
| Lymphoma Malignant                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 2  |
| Stomach, Glandular                 | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | 50 |
| Histiocytic Sarcoma                |             |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |          | 2  |
| Lymphoma Malignant                 |             |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |          | 2  |
| Tooth                              |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          | 1  |

| CARDIOVASCULAR SYSTEM                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel                                  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Aorta, Lymphoma Malignant, Metastatic, Spleen |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>10 mg/m3 | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|                                | 0732        | 0732  | 0733  | 0733  | 0733  | 0732  | 0731  | 0735  | 0732  | 0731  | 0731  | 0738  | 0732  | 0732  | 0733  | 0732  | 0733  | 0733  | 0733  | 0733  | 0733  | 0731  | 0733  | 0734  | 0737  |          | 0736  | 0735  | 0737  | 0738  |
| ANIMAL ID                      | 00326       | 00337 | 00338 | 00339 | 00340 | 00341 | 00342 | 00343 | 00344 | 00345 | 00346 | 00347 | 00348 | 00349 | 00350 | 00351 | 00352 | 00353 | 00354 | 00355 | 00356 | 00357 | 00358 | 00359 | 00360 | 00361    | 00362 | 00363 | 00364 | 00365 |

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma |   |   | X |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Lymphoma Malignant  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | 1  |

**ENDOCRINE SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|---|
| Adrenal Cortex                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |   |
| Histiocytic Sarcoma                     |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 3 |
| Adrenal Medulla                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |   |
| Pheochromocytoma Benign                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1 |
| Pheochromocytoma Malignant              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    | 1 |
| Islets, Pancreatic                      | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |   |
| Histiocytic Sarcoma, Metastatic, Spleen |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |   |
| Lymphoma Malignant, Metastatic, Spleen  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |    |    | 1 |
| Parathyroid Gland                       | M | M | + | + | + | M | + | + | + | M | + | + | + | + | M | M | + | M | + | M | + | M | M | + | + | + | + | + | 30 |    |   |
| Pituitary Gland                         | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |   |
| Pars Distalis, Adenoma                  | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |    | 6  |   |
| Thyroid Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>10 mg/m3                   | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|------|
|  | 0732        | 0732  | 0733  | 0733  | 0732  | 0731  | 0735  | 0732  | 0731  | 0731  | 0738  | 0732  | 0732  | 0733  | 0733  | 0733  | 0732  | 0733  | 0733  | 0732  | 0739  | 0732  | 0737  | 0736  |          | 0735  | 0737 |
| ANIMAL ID  | 00326       | 00337 | 00338 | 00339 | 00300 | 00301 | 00302 | 00303 | 00304 | 00305 | 00306 | 00307 | 00308 | 00309 | 00310 | 00311 | 00312 | 00313 | 00314 | 00315 | 00316 | 00317 | 00318 | 00319 | 00320    | 00321 |      |
| Histiocytic Sarcoma                              |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Ovary  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 49    |      |
| Cystadenoma                                      |             |       |       | X     |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |      |
| Histiocytic Sarcoma                              |             |       | X     |       |       |       |       |       |       | X     | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4     |      |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     | X     |       |       |       |          | 3     |      |
| Periovarian Tissue, Lymphoma Malignant           |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Uterus   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50    |      |
| Hemangioma                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Hemangiosarcoma                                  |             |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2     |      |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Polyp Stromal                                    |             |       | X     |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |          | 3     |      |
| <b>HEMATOPOIETIC SYSTEM</b>                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |      |
| Bone Marrow                                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50    |      |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2     |      |
| Lymphoma Malignant                               |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2     |      |
| Lymph Node                                       |             | +     | +     |       |       |       | +     |       | +     |       | +     |       | +     |       |       |       |       |       | +     | +     | +     |       |       |       |          | 11    |      |
| Lymphoma Malignant                               |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Axillary, Schwannoma Malignant, Metastatic, Skin |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Deep Cervical, Lymphoma Malignant                |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Lumbar, Histiocytic Sarcoma                      |             |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1     |      |
| Lumbar, Lymphoma Malignant                       |             |       | X     |       |       |       | X     |       |       |       |       |       |       |       |       |       | X     | X     | X     |       |       |       |       |       |          | 5     |      |
| Pancreatic, Histiocytic Sarcoma                  |             |       |       |       |       |       |       |       | X     |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2     |      |
| Pancreatic, Lymphoma Malignant                   |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |          | 2     |      |
| Renal, Histiocytic Sarcoma                       |             |       |       | X     |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2     |      |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|                    | 0732        | 0732  | 0733  | 0733  | 0732  | 0731  | 0735  | 0732  | 0731  | 0731  | 0738  | 0732  | 0732  | 0733  | 0733  | 0732  | 0733  | 0733  | 0732  | 0733  | 0733  | 0731  | 0733  | 0734  | 0737  |          | 0736  | 0735  | 0737  |       |
| 10 mg/m3           | ANIMAL ID   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |
|                    | 00326       | 00337 | 00338 | 00339 | 00300 | 00301 | 00302 | 00303 | 00304 | 00305 | 00306 | 00307 | 00308 | 00309 | 00310 | 00311 | 00312 | 00313 | 00314 | 00315 | 00316 | 00317 | 00318 | 00319 | 00320 | 00321    | 00322 | 00323 | 00324 | 00325 |

Renal, Lymphoma Malignant

X

1

Lymph Node, Bronchial  
Carcinoma, Metastatic, Mammary Gland  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + + + M + + + I + + + + + + + M + + + + + + +  
X X X  
X X X

44

1

4

5

Lymph Node, Mandibular  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + + + M + + + + + + + + + + + + + + + + + M  
X X X  
X X X

42

4

6

Lymph Node, Mediastinal  
Histiocytic Sarcoma  
Lymphoma Malignant  
Schwannoma Malignant, Metastatic, Skin

+ + + + + + + + + + + + I + + + + + + + M +  
X X X  
X X X

44

4

6

1

Lymph Node, Mesenteric  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + + + + + + + + + + + + + + + M + + + +  
X X X  
X X X

49

5

7

Spleen  
Hemangiosarcoma  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + + + + A + + + + + + + + + + + + + + + +  
X X X  
X X X  
X X X

49

1

4

8

Thymus  
Histiocytic Sarcoma  
Lymphoma Malignant

+  
X X X  
X X X

48

3

6

INTEGUMENTARY SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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



Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE                        | 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 |    |          |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------|
|   |             | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 |    | 5        |
| 10 mg/m3                                  | ANIMAL ID   | 3 | 3 | 3 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 4 | 8  | 3        |
|   |             | 2 | 2 | 3 | 3 | 2 | 1 | 5 | 2 | 1 | 1 | 8 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 9 | 2 | 7 | 1  | 3        |
|   |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | * TOTALS |
|   |             | 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 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3  |          |
|   |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5  |          |
|   |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9  |          |
| Mammary Gland                             |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |          |
| Adenoma                                   |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Carcinoma                                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Lymphoma Malignant, Metastatic, Spleen    |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 2  |          |
| Skin                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |          |
| Lymphoma Malignant                        |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Subcutaneous Tissue, Fibrous Histiocytoma |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Subcutaneous Tissue, Schwannoma Malignant |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 3  |          |
| <b>MUSCULOSKELETAL SYSTEM</b>             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |          |
| Bone                                      |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |          |
| Skeletal Muscle                           |             |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   | 4  |          |
| Histiocytic Sarcoma                       |             |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Lymphoma Malignant                        |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   | 1  |          |
| <b>NERVOUS SYSTEM</b>                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |          |
| Brain                                     |             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |          |
| Carcinoma, Metastatic, Mammary Gland      |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Lymphoma Malignant                        |             |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Meninges, Histiocytic Sarcoma             |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |          |
| Peripheral Nerve                          |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   | 3  |          |
| Spinal Cord                               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |   |   |   | 3  |          |
| <b>RESPIRATORY SYSTEM</b>                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>10 mg/m3                          | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0732        | 0732  | 0733  | 0733  | 0732  | 0731  | 0735  | 0732  | 0731  | 0731  | 0738  | 0732  | 0732  | 0733  | 0733  | 0732  | 0733  | 0733  | 0732  | 0739  | 0732  | 0737  | 0734  | 0738  | 0732  |          |
| ANIMAL ID   | 00326       | 00337 | 00338 | 00339 | 00300 | 00301 | 00302 | 00303 | 00304 | 00305 | 00306 | 00307 | 00308 | 00309 | 00310 | 00311 | 00312 | 00313 | 00314 | 00315 | 00316 | 00317 | 00318 | 00319 | 00320 |          |
| Larynx  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Lung  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Alveolar/Bronchiolar Adenoma                            | X           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 5     |          |
| Alveolar/Bronchiolar Carcinoma                          |             |       |       | X     |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | X     |       |       |       | 3     |          |
| Carcinoma, Metastatic, Mammary Gland                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Hepatocellular Carcinoma, Metastatic, Liver             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Histiocytic Sarcoma                                     |             |       | X     |       |       |       |       |       | X     |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |          |
| Lymphoma Malignant                                      |             |       |       |       |       |       | X     |       |       | X     |       |       |       |       |       |       |       |       | X     | X     |       |       |       |       | 5     |          |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Nose  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Lymphoma Malignant                                      |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Trachea   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| <b>SPECIAL SENSES SYSTEM</b>                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Eye   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Harderian Gland   | +           | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |
| Adenoma   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Carcinoma   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Lymphoma Malignant                                      |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | 2     |          |
| <b>URINARY SYSTEM</b>                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Kidney  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Carcinoma, Metastatic, Mammary Gland                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Histiocytic Sarcoma                                     |             |       | X     |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>10 mg/m3                          | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS              |  |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
|   | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>5      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>6<br>3<br>8      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>3      | 0<br>6<br>1<br>9      | 0<br>7<br>3<br>2      | 0<br>6<br>4<br>7      | 0<br>5<br>8<br>1      | 0<br>7<br>3<br>2      |                       |                       |  |
| ANIMAL ID   | 0<br>0<br>3<br>2<br>6 | 0<br>0<br>3<br>2<br>7 | 0<br>0<br>3<br>2<br>8 | 0<br>0<br>3<br>2<br>9 | 0<br>0<br>3<br>3<br>0 | 0<br>0<br>3<br>3<br>1 | 0<br>0<br>3<br>3<br>2 | 0<br>0<br>3<br>3<br>3 | 0<br>0<br>3<br>3<br>4 | 0<br>0<br>3<br>3<br>5 | 0<br>0<br>3<br>3<br>6 | 0<br>0<br>3<br>3<br>7 | 0<br>0<br>3<br>3<br>8 | 0<br>0<br>3<br>3<br>9 | 0<br>0<br>3<br>4<br>0 | 0<br>0<br>3<br>4<br>1 | 0<br>0<br>3<br>4<br>2 | 0<br>0<br>3<br>4<br>3 | 0<br>0<br>3<br>4<br>4 | 0<br>0<br>3<br>4<br>5 | 0<br>0<br>3<br>4<br>6 | 0<br>0<br>3<br>4<br>7 | 0<br>0<br>3<br>4<br>8 | 0<br>0<br>3<br>4<br>9 | 0<br>0<br>3<br>5<br>0 |  |
| Lymphoma Malignant                                      |                       |                       |                       |                       |                       |                       |                       | X                     |                       | X                     |                       |                       |                       |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       | 5                     |  |
| Pheochromocytoma Malignant, Metastatic, Adrenal Medulla |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |  |
| Urethra   |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | +                     | 1                     |  |
| Urinary Bladder   | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |  |
| Histiocytic Sarcoma                                     |                       |                       | X                     |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 2                     |  |
| Lymphoma Malignant                                      |                       |                       |                       |                       |                       |                       |                       |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       | X                     | X                     |                       |                       |                       |                       |                       | 4                     |  |
| <b>SYSTEMIC LESIONS</b>                                 |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |  |
| Multiple Organ  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50                    |  |
| Histiocytic Sarcoma                                     |                       |                       | X                     | X                     |                       |                       |                       |                       | X                     |                       | X                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 5                     |  |
| Lymphoma Malignant                                      |                       | X                     |                       |                       |                       |                       | X                     |                       | X                     |                       |                       |                       |                       |                       |                       |                       | X                     | X                     | X                     |                       |                       | X                     |                       |                       | 8                     |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3 | DAY ON TEST | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |
|--------------------------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|                                |             | 0637      | 0773 | 0773 | 0671 | 0775 | 0772 | 0773 | 0773 | 0773 | 0773 | 0773 | 0772 | 0772 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0493 | 0675 | 0773 | 0773 |                      |
|                                |             | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0                    |
|                                |             | 0         | 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    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5                    |
|                                |             | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 2    | 2    | 2    | 2    | 2    | 2                    |
|                                |             | 1         | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5                    |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus<br>Lymphoma Malignant                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Gallbladder<br>Histiocytic Sarcoma<br>Lymphoma Malignant              | A | + | + | + | A | + | + | + | + | M | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Lymphoma Malignant                          | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Large, Colon<br>Lymphoma Malignant                          | + | + | + | + | A | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Large, Rectum<br>Lymphoma Malignant                         | + | + | + | + | I | + | + | + | + | + | + | I | + | I | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Duodenum<br>Lymphoma Malignant                       | + | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Ileum<br>Histiocytic Sarcoma<br>Lymphoma Malignant   | + | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Intestine Small, Jejunum<br>Histiocytic Sarcoma<br>Lymphoma Malignant | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + |
| Liver<br>Hepatocellular Adenoma                                       | + | + | + | + | + | + | + | + | + | + | X | + | + | + | + | + | + | + | + | + | + | + | + | + | X |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3 | DAY ON TEST | 0637 | 0733 | 0731 | 0611 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0467 | 0673 | 0773 | females<br>(cont...) |      |
|--------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|
|                                | ANIMAL ID   | 0501 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0010 | 0011 | 0012 | 0013 | 0014 | 0015 | 0016 | 0017 | 0018 | 0019 | 0020 | 0021 | 0022 |                      | 0023 |

Hepatocellular Adenoma, Multiple  
Hepatocellular Carcinoma  
Hepatocellular Carcinoma, Multiple  
Histiocytic Sarcoma  
Lymphoma Malignant

X  
X  
X  
X  
X

Mesentery  
Histiocytic Sarcoma

+ + + + +

Pancreas  
Histiocytic Sarcoma  
Lymphoma Malignant

+ + + + + + + X + + + + + + + + + + A + + +  
X X X

Salivary Glands  
Lymphoma Malignant  
Mast Cell Tumor Benign

+  
X X

Stomach, Forestomach  
Lymphoma Malignant

+  
X

Stomach, Glandular  
Histiocytic Sarcoma  
Lymphoma Malignant

+ A + + +  
X X

CARDIOVASCULAR SYSTEM

Blood Vessel  
Aorta, Lymphoma Malignant

+  
X

Heart  
Histiocytic Sarcoma

+ A + + +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|                    | 0637        | 0773 | 0773 | 0661 | 0771 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 |           |                      |
| 30 mg/m3           | 0000        | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 |           |                      |
|                    | 5001        | 5002 | 5003 | 5004 | 5005 | 5006 | 5007 | 5008 | 5009 | 5010 | 5011 | 5012 | 5013 | 5014 | 5015 | 5016 | 5017 | 5018 | 5019 | 5020 | 5021 | 5022 | 5023 | 5024 |           |                      |

Lymphoma Malignant X

**ENDOCRINE SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant                     |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant                     |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pheochromocytoma Benign                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |
| Islets, Pancreatic                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Adenoma                                |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant                     |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant, Metastatic, Spleen |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland                      | + | + | + | M | + | M | M | M | + | + | + | + | + | + | + | + | M | + | M | M | + | M | + |
| Pituitary Gland                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma                 |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   | X |   | X |   |   | X |
| Thyroid Gland                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymphoma Malignant                     |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicular Cell, Adenoma               |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE   | 30 mg/m3 | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID |   |      |                      |   |   |   |   |
|----------------------|----------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|---|------|----------------------|---|---|---|---|
|                      |          | 0637        | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 |           |   | 0677 | 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    | 0050                 |   |   |   |   |
|                      |          | 6           | 7    | 7    | 6    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7    | 7         | 7 | 7    | 0051                 |   |   |   |   |
|                      |          | 3           | 3    | 3    | 1    | 1    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 2    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3         | 3 | 3    | 0052                 |   |   |   |   |
|                      |          | 7           | 2    | 1    | 9    | 5    | 2    | 3    | 3    | 3    | 3    | 3    | 2    | 2    | 2    | 3    | 2    | 3    | 3    | 3    | 3    | 3    | 3         | 3 | 3    | 0053                 |   |   |   |   |
|                      |          | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0 | 0    | 0054                 |   |   |   |   |
|                      |          | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0 | 0    | 0055                 |   |   |   |   |
|                      |          | 5           | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5         | 5 | 5    | 0056                 |   |   |   |   |
|                      |          | 0           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1         | 1 | 1    | 0057                 |   |   |   |   |
|                      |          | 1           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2         | 3 | 4    | 0058                 |   |   |   |   |
|                      |          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      | females<br>(cont...) |   |   |   |   |
| Clitoral Gland       |          | +           | M    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | +    | +         | + | +    |                      | M | + | + |   |
| Ovary                |          | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    |                      | + | + | + | + |
| Cystadenoma          |          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X         |   |      |                      |   |   |   |   |
| Histiocytic Sarcoma  |          |             |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                      |   |   |   |   |
| Lymphoma Malignant   |          |             | X    | X    | X    |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      | X    |           |   |      |                      |   |   |   |   |
| Uterus               |          | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         | + | +    |                      | + | + | + | + |
| Histiocytic Sarcoma  |          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                      |   |   |   |   |
| Lymphoma Malignant   |          |             |      | X    | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                      |   |   |   |   |
| Polyp Stromal        |          |             |      |      |      | X    |      | X    |      |      |      | X    |      |      |      |      |      |      |      | X    |      |      |           |   |      |                      |   |   |   |   |
| Endometrium, Adenoma |          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |   |      |                      |   |   |   | X |

**HEMATOPOIETIC SYSTEM**

|                                     |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow                         |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemangiosarcoma, Metastatic, Spleen |  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Histiocytic Sarcoma                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant                  |  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymph Node                          |  |   |   | + | + |   |   | + | + | + |   |   |   | + |   |   |   | + |   |   |   |   |   |   |   |   | + |   |   |
| Histiocytic Sarcoma                 |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axillary, Lymphoma Malignant        |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Deep Cervical, Lymphoma Malignant   |  |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Iliac, Histiocytic Sarcoma          |  |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lumbar, Lymphoma Malignant          |  |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pancreatic, Lymphoma Malignant      |  |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Histiocytic Sarcoma          |  |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal, Lymphoma Malignant           |  |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE   | 30 mg/m3 | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |      |      |      |   |   |
|--|----------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|---|---|
|  |          | 0637        | 0733 | 0731 | 0611 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | 0493 | 0675 |                      | 0773 | 0773 |      |   |   |
|  |          | ANIMAL ID   | 0050 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 | 0055 |                      | 0055 | 0055 | 0055 |   |   |
| Lymph Node, Bronchial<br>Histiocytic Sarcoma<br>Lymphoma Malignant     |          | +           | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | +    | +    | I    | I    | +                    | +    | +    | +    | + | + |
|  |          |             | X    | X    | X    |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      | X                    |      |      |      |   |   |
| Lymph Node, Mandibular<br>Histiocytic Sarcoma<br>Lymphoma Malignant    |          | +           | +    | +    | +    | M    | +    | +    | +    | +    | +    | +    | M    | +    | M    | +    | +    | M    | M    | +    | +    | I                    | +    | +    | M    | + |   |
|  |          |             | X    | X    | X    |      |      |      |      | X    |      |      |      |      |      |      | X    |      |      |      |      | X                    |      |      |      |   |   |
| Lymph Node, Mediastinal<br>Histiocytic Sarcoma<br>Lymphoma Malignant   |          | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | M                    | +    | +    | +    | + |   |
|  |          |             |      |      | X    | X    |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |                      |      |      |      |   |   |
| Lymph Node, Mesenteric<br>Histiocytic Sarcoma<br>Lymphoma Malignant    |          | +           | +    | +    | +    | I    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | A    | +    | + | + |
|  |          |             | X    | X    | X    |      |      |      |      | X    |      |      |      |      |      | X    |      |      |      |      |      |                      | X    |      | X    |   |   |
| Spleen<br>Hemangiosarcoma<br>Histiocytic Sarcoma<br>Lymphoma Malignant |          | +           | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | A    | +    | + | + |
|  |          | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |   |
|  |          |             | X    | X    | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      | X    |      |      |   |   |
| Thymus<br>Histiocytic Sarcoma<br>Lymphoma Malignant                    |          | +           | +    | +    | +    | +    | +    | I    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                    | +    | +    | +    | + | + |
|  |          |             |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |      |   |   |
|  |          |             |      |      | X    | X    |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |                      | X    |      |      |   |   |

**INTEGUMENTARY SYSTEM**

|                                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland<br>Adenoma<br>Carcinoma |  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|                                       |  |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                       |  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|-------|-------|
| <b>B6C3F1 MICE FEMALE</b><br><b>30 mg/m3</b> | DAY ON TEST | 0637  | 0733  | 0731  | 0611  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0467  | 0673  | 0773  | females<br>(cont...) |       |       |
|  | ANIMAL ID   | 00501 | 00502 | 00503 | 00504 | 00505 | 00506 | 00507 | 00508 | 00509 | 00510 | 00511 | 00512 | 00513 | 00514 | 00515 | 00516 | 00517 | 00518 | 00519 | 00520 | 00521 |                      | 00522 | 00523 |

Lymphoma Malignant  
 Lymphoma Malignant, Metastatic, Lymph Node, Mesenteric  
 Lymphoma Malignant, Metastatic, Spleen

X  
 X

Skin  
 Lymphoma Malignant  
 Schwannoma Malignant  
 Subcutaneous Tissue, Hemangiosarcoma

+  
 X X

**MUSCULOSKELETAL SYSTEM**

Bone  
 Hemangiosarcoma, Metastatic, Spleen

+  
 X

Skeletal Muscle

**NERVOUS SYSTEM**

Brain  
 Lymphoma Malignant

+  
 X X

Peripheral Nerve

Spinal Cord

**RESPIRATORY SYSTEM**

Larynx  
 Lymphoma Malignant

+  
 X

Lung

+ +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3 | DAY ON TEST | 0637 | 0777 | 0676 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0467 | 0677 | 0777 |     |
|--------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
|                                | ANIMAL ID   | 037  | 021  | 059  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 005  | 097  | 073  | 033 |
|                                |             | 07   | 02   | 01   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02  |
|                                |             | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00  |
|                                |             | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05   | 05  |
|                                |             | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 00   | 01   | 01   | 01   | 01   | 01   | 01   | 01   | 01   | 01   | 01   | 02   | 02   | 02   | 02  |
|                                |             | 01   | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02  |

females  
(cont...)

Alveolar/Bronchiolar Adenoma X X X X X  
 Alveolar/Bronchiolar Carcinoma X X X X X X  
 Alveolar/Bronchiolar Carcinoma, Multiple X X X X X X  
 Hepatocellular Carcinoma, Metastatic, Liver X X X X X X  
 Histiocytic Sarcoma X X X X X X  
 Lymphoma Malignant X X X X X X

Nose +  
 Histiocytic Sarcoma

Trachea +  
 Lymphoma Malignant X

**SPECIAL SENSES SYSTEM**

Eye +  
 Lymphoma Malignant X

Harderian Gland + + + + A + + + + + + + + + + + + + + + + + +  
 Adenoma X X X X X X X X X X X X X X X X X X  
 Carcinoma X X X X X X X X X X X X X X X X X X X  
 Lymphoma Malignant X X X X X X X X X X X X X X X X X X X

**URINARY SYSTEM**

Kidney + A + + +  
 Histiocytic Sarcoma X X X X X X X X X X X X X X X X X X X  
 Lymphoma Malignant X X X X X X X X X X X X X X X X X X X

Urinary Bladder +  
 Histiocytic Sarcoma X

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |                              |
|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------------------|
| <b>B6C3F1 MICE FEMALE</b><br><b>30 mg/m3</b> | DAY ON TEST | 067 | 077 | 077 | 076 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 046 | 077 | 077 | 077 | <b>females<br/>(cont...)</b> |
|  | ANIMAL ID   | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 |                              |
|  |             | 123 | 456 | 789 | 011 | 222 | 333 | 444 | 555 | 666 | 777 | 888 | 999 | 011 | 222 | 333 | 444 | 555 | 666 | 777 | 888 | 999 | 011 |                              |
| Lymphoma Malignant                           |             | X   |     | X   |     |     |     |     |     |     |     |     | X   |     |     | X   |     |     |     | X   |     |     |     |                              |

**SYSTEMIC LESIONS**

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multiple Organ      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lymphoma Malignant  | X | X | X |   |   |   |   |   |   |   | X |   |   | X |   |   |   | X |   |   | X |   |   |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                 |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|
| <b>B6C3F1 MICE FEMALE</b><br><b>30 mg/m3</b> | DAY ON TEST | 0198  | 0733  | 0732  | 0732  | 0635  | 0732  | 0634  | 0733  | 0733  | 0733  | 0733  | 0730  | 0733  | 0733  | 0438  | 0730  | 0731  | 0731  | 0733  | 0733  | 0733  | 0733  | <b>* TOTALS</b> |       |
|  | ANIMAL ID   | 00526 | 00527 | 00528 | 00529 | 00530 | 00531 | 00532 | 00533 | 00534 | 00535 | 00536 | 00537 | 00538 | 00539 | 00540 | 00541 | 00542 | 00543 | 00544 | 00545 | 00546 | 00547 |                 | 00548 |

### ALIMENTARY SYSTEM

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymphoma Malignant        |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Gallbladder               | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Histiocytic Sarcoma       |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant        |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   |   |   |   |   |   |   | 3  |
| Intestine Large, Cecum    | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Lymphoma Malignant        |   |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 3  |
| Intestine Large, Colon    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Lymphoma Malignant        |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   | 2  |
| Intestine Large, Rectum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Lymphoma Malignant        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Intestine Small, Duodenum | A | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | 43 |
| Lymphoma Malignant        |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   | X |   | 4  |
| Intestine Small, Ileum    | A | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Histiocytic Sarcoma       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant        |   |   |   | X |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   | 5  |
| Intestine Small, Jejunum  | A | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Histiocytic Sarcoma       |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Lymphoma Malignant        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Liver                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hepatocellular Adenoma    |   |   |   |   | X |   | X |   |   |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   | 7  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3 | 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 | * TOTALS |  |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|--|
|                                | ANIMAL ID   | 1 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |          |  |
|                                |             | 9 | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 3 | 1 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 8 | 0 | 3 | 2 | 3 | 3 | 3 | 3 |          |  |
|                                |             | 8 | 3 | 2 | 2 | 5 | 2 | 9 | 3 | 6 | 2 | 2 | 7 | 1 | 1 | 3 | 3 | 0 | 9 | 1 | 5 | 1 | 3 | 3 | 1 | 1 | 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        |  |
|                                |             | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5        |  |
|                                |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5        |  |
|                                |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |          |  |

Hepatocellular Adenoma, Multiple X 3  
 Hepatocellular Carcinoma X X X 5  
 Hepatocellular Carcinoma, Multiple X X 2  
 Histiocytic Sarcoma X 2  
 Lymphoma Malignant X X X X X 9

Mesentery X 5  
 Histiocytic Sarcoma X 1

Pancreas X 49  
 Histiocytic Sarcoma X 2  
 Lymphoma Malignant X X 5

Salivary Glands X 50  
 Lymphoma Malignant X 2  
 Mast Cell Tumor Benign X 1

Stomach, Forestomach X 50  
 Lymphoma Malignant X 2

Stomach, Glandular X 49  
 Histiocytic Sarcoma X 1  
 Lymphoma Malignant X 3

**CARDIOVASCULAR SYSTEM**

Blood Vessel X 50  
 Aorta, Lymphoma Malignant X 1

Heart X 49  
 Histiocytic Sarcoma X 1

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3         | 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 |   |   |   |    |    |
|  | 1           | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |          | 7 |   |   |   |    |    |
| ANIMAL ID                              | 9           | 3 | 3 | 3 | 5 | 3 | 4 | 3 | 1 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 8 | 0 | 3 | 2 | 3        | 3 | 3 | 3 | 3 | 3  | 3  |
|  | 8           | 3 | 2 | 2 | 5 | 2 | 9 | 3 | 6 | 2 | 2 | 7 | 1 | 1 | 3 | 3 | 0 | 9 | 1 | 5 | 1        | 3 | 3 | 1 | 1 | 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 | 0  | 0  |
|  | 0           | 0 | 0 | 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 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5        | 5 | 5 | 5 | 5 | 5  | 5  |
|  | 2           | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 4 | 4 | 4 | 4  | 5  |
|  | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6        | 7 | 8 | 9 | 0 | 0  | 0  |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |          |   |   |   | X |    | 4  |
| <b>ENDOCRINE SYSTEM</b>                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    |    |
| Adrenal Cortex                         | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | + | +  | 50 |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |          |   |   |   |   |    | 2  |
| Adrenal Medulla                        | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | + | +  | 50 |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |
| Pheochromocytoma Benign                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |
| Islets, Pancreatic                     | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | + | +  | 49 |
| Adenoma                                |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |
| Lymphoma Malignant, Metastatic, Spleen |             |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |
| Parathyroid Gland                      | M           | + | + | + | + | + | + | M | M | + | + | M | M | + | + | + | + | + | + | + | M        | + | + | + | + | 36 |    |
| Pituitary Gland                        | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | +        | + | + | + | + | +  | 49 |
| Pars Distalis, Adenoma                 |             |   | X |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |          |   |   |   |   |    | 7  |
| Thyroid Gland                          | +           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +        | + | + | + | + | +  | 50 |
| Lymphoma Malignant                     |             |   |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |          |   |   |   |   |    | 3  |
| Follicular Cell, Adenoma               |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |   |   |   |    | 1  |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3      | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |  |
|-------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|--|
|                                     | 018         | 073   | 073   | 073   | 065   | 073   | 064   | 073   | 073   | 073   | 073   | 073   | 073   | 073   | 073   | 073   | 048   | 077   | 077   | 077   |          | 077   |       |       |       |  |
| ANIMAL ID                           | 00526       | 00527 | 00528 | 00529 | 00530 | 00531 | 00532 | 00533 | 00534 | 00535 | 00536 | 00537 | 00538 | 00539 | 00540 | 00541 | 00542 | 00543 | 00544 | 00545 | 00546    | 00547 | 00548 | 00549 | 00550 |  |
| Clitoral Gland                      | +           | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 45    |  |
| Ovary                               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | I     | +     | +     | +        | +     | +     | +     | 49    |  |
| Cystadenoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |          |       |       |       | 2     |  |
| Histiocytic Sarcoma                 |             |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |          |       |       |       | 2     |  |
| Lymphoma Malignant                  |             |       |       |       |       |       |       |       |       |       | X     |       |       |       | X     |       |       |       |       |       |          |       |       |       | 7     |  |
| Uterus                              | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 50    |  |
| Histiocytic Sarcoma                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |          |       |       |       | 1     |  |
| Lymphoma Malignant                  |             |       |       |       |       |       |       |       |       |       | X     |       |       |       | X     |       |       |       |       |       |          |       |       |       | 4     |  |
| Polyp Stromal                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | X     |       |       | 5     |  |
| Endometrium, Adenoma                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| <b>HEMATOPOIETIC SYSTEM</b>         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       |  |
| Bone Marrow                         | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | 50    |  |
| Hemangiosarcoma, Metastatic, Spleen |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Histiocytic Sarcoma                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |          |       |       |       | 1     |  |
| Lymphoma Malignant                  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |          |       |       |       | 2     |  |
| Lymph Node                          |             |       |       |       |       |       |       |       |       |       |       | +     |       | +     |       |       |       |       |       |       | +        |       |       |       | 11    |  |
| Histiocytic Sarcoma                 |             |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Axillary, Lymphoma Malignant        |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Deep Cervical, Lymphoma Malignant   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Iliac, Histiocytic Sarcoma          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Lumbar, Lymphoma Malignant          |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | X        |       |       |       | 4     |  |
| Pancreatic, Lymphoma Malignant      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 2     |  |
| Renal, Histiocytic Sarcoma          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       | 1     |  |
| Renal, Lymphoma Malignant           |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | X        |       |       |       | 4     |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3              | DAY ON TEST | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30    | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | ANIMAL ID   | 00526 | 00527 | 00528 | 00529 | 00530 | 00531 | 00532 | 00533 | 00534 | 00535 | 00536 | 00537 | 00538 | 00539 | 00540 | 00541 | 00542 | 00543 | 00544 | 00545 | 00546 | 00547 | 00548 | 00549 | 00550 | 00551 | 00552 | 00553 | 00554 | 00555 |          |
| Lymph Node, Bronchial Histiocytic Sarcoma   | M           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | I     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 44       |
| Lymphoma Malignant                          |             |       | X     |       |       |       |       |       |       |       |       | X     | X     |       | X     |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       | 11       |
| Lymph Node, Mandibular Histiocytic Sarcoma  | +           | +     | +     | M     | M     | M     | +     | +     | +     | I     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | M     | M     | +     | +     |       |       |       |       |       | 37    |          |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       | X     |       |       | X     | X     |       |       |       |       | X     |       |       |       |       |       |       | X     |       |       | 10    |          |
| Lymph Node, Mediastinal Histiocytic Sarcoma | +           | +     | +     | +     | I     | +     | +     | +     | +     | I     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 45    |          |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       | X     | X     |       | X     |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | 7     |          |
| Lymph Node, Mesenteric Histiocytic Sarcoma  | M           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 47    |          |
| Lymphoma Malignant                          |             |       | X     |       |       |       |       |       |       |       |       | X     | X     |       | X     |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       | 3     |          |
| Spleen Hemangiosarcoma                      | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 48    |          |
| Histiocytic Sarcoma                         |             |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       | 2     |          |
| Lymphoma Malignant                          |             |       | X     |       |       |       |       |       |       |       |       | X     | X     |       | X     | X     |       |       |       |       | X     |       |       |       |       |       | X     |       |       |       | 12    |          |
| Thymus Histiocytic Sarcoma                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | I     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 47    |          |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       | X     | X     |       | X     |       |       |       |       |       | X     |       |       |       |       |       | X     |       |       |       | 1     |          |
|   |             |       |       |       |       |       |       |       |       |       |       | X     | X     |       | X     |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | 8     |          |
| <b>INTEGUMENTARY SYSTEM</b>                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Mammary Gland Adenoma                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Carcinoma                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE                                     | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |
|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|  | 018         | 073 | 073 | 073 | 065 | 073 | 064 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 | 073 |          |
| 30 mg/m3   | 008         | 003 | 002 | 002 | 005 | 002 | 009 | 003 | 006 | 002 | 002 | 007 | 001 | 001 | 003 | 003 | 008 | 009 | 001 | 005 | 003 | 003 |          |
|  | 005         | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 | 005 |          |
|  | 002         | 002 | 002 | 002 | 003 | 003 | 003 | 003 | 003 | 003 | 003 | 003 | 003 | 003 | 004 | 004 | 004 | 004 | 004 | 004 | 004 | 004 |          |
|  | 006         | 007 | 008 | 009 | 000 | 001 | 002 | 003 | 004 | 005 | 006 | 007 | 008 | 009 | 000 | 001 | 002 | 003 | 004 | 005 | 006 | 007 |          |
| Lymphoma Malignant                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| Lymphoma Malignant, Metastatic, Lymph Node, Mesenteric |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| Lymphoma Malignant, Metastatic, Spleen                 |             |     |     |     |     |     |     |     |     |     |     | X   |     |     |     |     |     |     |     |     |     |     | 1        |
| Skin   | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50       |
| Lymphoma Malignant                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     | X   |     |     |     |     |     |     |     | 3        |
| Schwannoma Malignant                                   |             |     |     |     | X   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| Subcutaneous Tissue, Hemangiosarcoma                   |             |     |     |     |     |     |     |     |     | X   |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| <b>MUSCULOSKELETAL SYSTEM</b>                          |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          |
| Bone   | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50       |
| Hemangiosarcoma, Metastatic, Spleen                    |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| Skeletal Muscle  |             |     |     |     |     |     |     |     |     |     |     | +   |     |     |     |     |     |     |     | +   |     |     | 2        |
| <b>NERVOUS SYSTEM</b>                                  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          |
| Brain  | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50       |
| Lymphoma Malignant                                     |             |     |     |     |     |     |     |     |     |     |     |     |     | X   |     |     |     |     |     |     |     |     | 3        |
| Peripheral Nerve                                       |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | +   |     | 1        |
| Spinal Cord  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | +   |     | 1        |
| <b>RESPIRATORY SYSTEM</b>                              |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |          |
| Larynx   | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50       |
| Lymphoma Malignant                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1        |
| Lung   | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50       |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>30 mg/m3              | DAY ON TEST | 01    | 02    | 03    | 04    | 05    | 06    | 07    | 08    | 09    | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30    | * TOTALS |       |    |    |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|----|----|
|   | ANIMAL ID   | 00526 | 00527 | 00528 | 00529 | 00530 | 00531 | 00532 | 00533 | 00534 | 00535 | 00536 | 00537 | 00538 | 00539 | 00540 | 00541 | 00542 | 00543 | 00544 | 00545 | 00546 | 00547 | 00548 | 00549 | 00550 | 00551 | 00552 | 00553 | 00554 | 00555 |          | 00556 |    |    |
| Alveolar/Bronchiolar Adenoma                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 3  |    |
| Alveolar/Bronchiolar Carcinoma              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 5  |    |
| Alveolar/Bronchiolar Carcinoma, Multiple    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1  |    |
| Hepatocellular Carcinoma, Metastatic, Liver |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2  |    |
| Histiocytic Sarcoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 2  |    |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 9  |    |
| Nose  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 50 |    |
| Histiocytic Sarcoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1  |    |
| Trachea                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 50 |    |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 1  |    |
| <b>SPECIAL SENSES SYSTEM</b>                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    |    |
| Eye   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | 50 |    |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 1  |
| Harderian Gland                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 49 |
| Adenoma                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 5  |
| Carcinoma                                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 2  |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 2  |
| <b>URINARY SYSTEM</b>                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    |    |
| Kidney                                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 49 |
| Histiocytic Sarcoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 3  |
| Lymphoma Malignant                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 9  |
| Urinary Bladder                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 50 |
| Histiocytic Sarcoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |    | 2  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 02/02/2015

Test Type: CHRONIC

Metal Working Fluids: Trim VX

Time Report Requested: 13:50:12

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMVX

First Dose M/F: 08/03/09 / 08/03/09

Species/Strain: MICE/B6C3F1

Lab: BNW

| DAY ON TEST         | B6C3F1 MICE FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  | * TOTALS |
|---------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|----------|
|                     | 018                | 073   | 073   | 073   | 065   | 073   | 064   | 073   | 071   | 073   | 073   | 073   | 073   | 073   | 073   | 048   | 074   | 077   | 077   | 077   | 073   | 077   | 077   |  |          |
| ANIMAL ID           | 00526              | 00552 | 00552 | 00552 | 00550 | 00551 | 00552 | 00553 | 00554 | 00555 | 00556 | 00557 | 00558 | 00559 | 00560 | 00561 | 00562 | 00563 | 00564 | 00565 | 00566 | 00567 | 00568 |  |          |
| Lymphoma Malignant  |                    | X     |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       | X     |       |       |       |       | 8     |  |          |
| SYSTEMIC LESIONS    |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |          |
| Multiple Organ      | +                  | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |  |          |
| Histiocytic Sarcoma |                    |       |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       | 3     |  |          |
| Lymphoma Malignant  |                    | X     |       |       |       |       |       |       |       | X     | X     |       | X     | X     |       |       |       |       | X     |       |       | X     | 14    |  |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3 | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | females<br>(cont...) |                  |                       |                  |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|----------------------|------------------|-----------------------|------------------|
|                                 | 0<br>7<br>1<br>5 | 0<br>5<br>1<br>3 | 0<br>6<br>6<br>8 | 0<br>6<br>4<br>5 | 0<br>7<br>3<br>1 | 0<br>5<br>5<br>7 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>6<br>6<br>1 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>5 | 0<br>6<br>3<br>4 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>3 | 0<br>7<br>3<br>2 | 0<br>6<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>1<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 |           |                      | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>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<br>0<br>7<br>0<br>1 |                  |

Mesentery  
 Alveolar/Bronchiolar Carcinoma, Metastatic, Lung  
 Hemangioma  
 Histiocytic Sarcoma  
 Lymphoma Malignant  
 Schwannoma Malignant, Metastatic, Heart

+ +  
 X  
 X

Pancreas  
 Alveolar/Bronchiolar Carcinoma, Metastatic, Lung  
 Histiocytic Sarcoma  
 Lymphoma Malignant  
 Sarcoma, Metastatic, Skin

+  
 X X  
 X

Salivary Glands  
 Histiocytic Sarcoma  
 Lymphoma Malignant

+  
 X X

Stomach, Forestomach  
 Histiocytic Sarcoma

+  
 X

Stomach, Glandular  
 Histiocytic Sarcoma  
 Lymphoma Malignant

+  
 X X

**CARDIOVASCULAR SYSTEM**

Blood Vessel  
 Aorta, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung

+ +

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | females<br>(cont...) |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|----------------------|
|  | 0715        | 0667 | 0643 | 0753 | 0773 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 | 0677 | 0773 |           |                      |
| Aorta, Histiocytic Sarcoma, Metastatic, Spleen   |             |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Heart  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                      |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Histiocytic Sarcoma                              |             |      |      | X    |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Lymphoma Malignant                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |           |                      |
| Endocardium, Schwannoma Malignant                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| <b>ENDOCRINE SYSTEM</b>                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Adrenal Cortex                                   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                      |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Histiocytic Sarcoma                              |             |      |      | X    |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Lymphoma Malignant                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |
| Subcapsular, Adenoma                             |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |           |                      |
| Adrenal Medulla                                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                      |
| Islets, Pancreatic Carcinoma                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                      |
| Parathyroid Gland                                | +           | M    | M    | M    | M    | M    | M    | M    | +    | M    | +    | +    | +    | M    | M    | +    | M    | +    | +    | M    | M    | M    | M    | +    | +         |                      |
| Pituitary Gland                                  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +         |                      |
| Pars Distalis, Adenoma                           |             |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |           |                      |
| Pars Distalis, Carcinoma                         |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      | X    |      |      |           |                      |
| Thyroid Gland                                    | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |           |                      |
| Lymphoma Malignant                               |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |                      |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

|                           |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <b>B6C3F1 MICE FEMALE</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 | 0 | 0 | 0 | 0 |   |   |   |   |
|                           |             | 7 | 5 | 6 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |   |   |   |
|                           |             | 1 | 1 | 6 | 4 | 3 | 5 | 3 | 3 | 6 | 3 | 2 | 3 | 9 | 3 | 3 | 3 | 3 | 1 | 3 | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |   |
|                           |             | 5 | 3 | 8 | 5 | 1 | 7 | 3 | 3 | 1 | 3 | 5 | 3 | 4 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |   |
| <b>100 mg/m3</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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |   |   |
|                           |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|                           | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |   |

females  
(cont...)

Follicular Cell, Carcinoma, Multiple

X

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|
| Clitoral Gland   | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |   |   |   |   |   |  |  |  |
| Ovary  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |   |   |   |  |  |  |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung                     |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Cystadenoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Granulosa Cell Tumor Benign  |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Histiocytic Sarcoma  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Lymphoma Malignant   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Periovarian Tissue, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Periovarian Tissue, Histiocytic Sarcoma                              |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Periovarian Tissue, Sarcoma, Metastatic, Skin                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Uterus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |  |  |
| Carcinoma  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Hemangioma   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Histiocytic Sarcoma  |   |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Lymphoma Malignant   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |
| Polyp Stromal  |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |  |  |

**HEMATOPOIETIC SYSTEM**

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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





Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3 | 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...) |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|
|                                 |             | 7 | 5 | 6 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 1 | 7 | 7 | 7 | 7 | 7 |           |                      |
|                                 |             | 1 | 1 | 6 | 4 | 3 | 5 | 3 | 3 | 6 | 3 | 2 | 3 | 9 | 3 | 3 | 3 | 1 | 3 | 6 | 3 | 3 | 3 | 3 |           |                      |
|                                 |             | 5 | 3 | 8 | 5 | 1 | 7 | 3 | 3 | 1 | 3 | 5 | 3 | 4 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 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 | 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 |           |                      |
|                                 |             | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |           |                      |
|                                 |             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |           |                      |

Lymphoma Malignant

X

Lymph Node, Mesenteric

I +

Alveolar/Bronchiolar Carcinoma, Metastatic, Lung

Histiocytic Sarcoma

X

X

Lymphoma Malignant

X

X

X

Sarcoma, Metastatic, Skin

Spleen

A +

Histiocytic Sarcoma

X

X

Lymphoma Malignant

X

X

X

X

Thymus

+ +

Alveolar/Bronchiolar Carcinoma, Metastatic, Lung

X

Histiocytic Sarcoma

X

X

Lymphoma Malignant

X

Sarcoma, Metastatic, Skin

## INTEGUMENTARY SYSTEM

Mammary Gland

+ +

Alveolar/Bronchiolar Carcinoma, Metastatic, Lung

X

Histiocytic Sarcoma, Metastatic, Spleen

X

Lymphoma Malignant, Metastatic, Spleen

Skin

+ +

Schwannoma Benign

X

Subcutaneous Tissue, Fibrous Histiocytoma

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3 | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | females<br>(cont...) |
|---------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
|                                 | 0715        | 0716 | 0718 | 0719 | 0721 | 0723 | 0725 | 0727 | 0729 | 0731 | 0733 | 0735 | 0737 | 0739 | 0741 | 0743 | 0745 | 0747 | 0749 | 0751 | 0753 | 0755 | 0757 | 0759 |      |                      |
| ANIMAL ID                       | 0070        | 0072 | 0074 | 0076 | 0078 | 0080 | 0082 | 0084 | 0086 | 0088 | 0090 | 0092 | 0094 | 0096 | 0098 | 0100 | 0102 | 0104 | 0106 | 0108 | 0110 | 0112 | 0114 | 0116 | 0118 |                      |

Subcutaneous Tissue, Sarcoma

**MUSCULOSKELETAL SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone<br>Mandible, Fibrosarcoma  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle<br>Alveolar/Bronchiolar Carcinoma, Metastatic,<br>Lung<br>Sarcoma |   | + | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
|   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**NERVOUS SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain<br>Lymphoma Malignant<br>Meninges, Histiocytic Sarcoma | + | + | + | + | + | + | + | + | + | + | X | + | + | + | + | + | + | + | + | + | + | + | + | + | X |
| Peripheral Nerve   |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |
| Spinal Cord  |   |   | + |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |

**RESPIRATORY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx<br>Lymphoma Malignant   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lung<br>Alveolar/Bronchiolar Adenoma<br>Alveolar/Bronchiolar Adenoma, Multiple<br>Alveolar/Bronchiolar Carcinoma | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | X |   |   |   | + |
|  |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |
|  |   |   |   |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   | X |   | X |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

**Experiment Number:** 20523 - 04  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
Metal Working Fluids: Trim VX  
**CAS Number:** TRIMVX

**Date Report Requested:** 02/02/2015  
**Time Report Requested:** 13:50:12  
**First Dose M/F:** 08/03/09 / 08/03/09  
**Lab:** BNW

| B6C3F1 MICE FEMALE | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|                    | 071515      | 0533  | 0668  | 0665  | 0771  | 0753  | 0773  | 0773  | 0661  | 0773  | 0773  | 0663  | 0773  | 0773  | 0773  | 0662  | 0772  | 0771  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  |                      |
| 100 mg/m3          | 00700       | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700 | 00700                |
|                    | 00770       | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770 | 00770                |
|                    | 00011       | 00012 | 00013 | 00014 | 00015 | 00016 | 00017 | 00018 | 00019 | 00020 | 00021 | 00022 | 00023 | 00024 | 00025 | 00026 | 00027 | 00028 | 00029 | 00030 | 00031 | 00032 | 00033 | 00034 | 00035                |

Alveolar/Bronchiolar Carcinoma, Multiple  
Carcinoma, Metastatic, Harderian Gland  
Hepatocellular Carcinoma, Metastatic, Liver  
Histiocytic Sarcoma  
Lymphoma Malignant  
Sarcoma, Metastatic, Skin

Nose  
Carcinoma, Metastatic, Harderian Gland  
Histiocytic Sarcoma

Trachea  
Lymphoma Malignant

**SPECIAL SENSES SYSTEM**

Ear

Eye

Harderian Gland  
Adenoma  
Carcinoma  
Lymphoma Malignant

**URINARY SYSTEM**

Kidney  
Alveolar/Bronchiolar Carcinoma, Metastatic,  
Lung  
Histiocytic Sarcoma

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

**Experiment Number:** 20523 - 04  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P04: NEOPLASMS BY INDIVIDUAL ANIMAL**  
 Metal Working Fluids: Trim VX  
**CAS Number:** TRIMVX

**Date Report Requested:** 02/02/2015  
**Time Report Requested:** 13:50:12  
**First Dose M/F:** 08/03/09 / 08/03/09  
**Lab:** BNW

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>B6C3F1 MICE FEMALE</b><br><b>100 mg/m3</b> | DAY ON TEST | 07 | 05 | 06 | 06 | 07 | 05 | 07 | 07 | 06 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 01 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 |
|   |             | 11 | 16 | 14 | 13 | 15 | 13 | 13 | 16 | 13 | 12 | 13 | 19 | 13 | 13 | 13 | 11 | 13 | 16 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
|   |             | 53 | 38 | 58 | 51 | 77 | 33 | 33 | 11 | 33 | 53 | 33 | 42 | 22 | 23 | 23 | 22 | 22 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
|   | ANIMAL ID   | 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 | 00 | 00 | 00 |
|   |             | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
|   |             | 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 | 00 | 00 | 00 |
|   |             | 12 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 00 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |

females  
(cont...)

Lymphoma Malignant  
 Sarcoma, Metastatic, Skin  
 Schwannoma Malignant, Metastatic, Heart

X

X

Urinary Bladder

+ +

Histiocytic Sarcoma

X

X

Lymphoma Malignant

X

X

X

**SYSTEMIC LESIONS**

Multiple Organ

+ +

Histiocytic Sarcoma

X

X

Lymphoma Malignant

X

X

X

X

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

|                           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|---------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| <b>B6C3F1 MICE FEMALE</b> | DAY ON TEST | 0733  | 0673  | 0773  | 0773  | 0679  | 0731  | 0638  | 0771  | 0773  | 0674  | 0773  | 0577  | 0773  | 0771  | 0672  | 0763  | 0773  | 0677  | 0773  | 0678  | 0773  | 0773  | 0673  | 0773  | 0673  | 0773  | 0773  |       |   |
|                           | ANIMAL ID   | 00726 | 00778 | 00790 | 00701 | 00702 | 00703 | 00704 | 00705 | 00706 | 00707 | 00708 | 00709 | 00710 | 00711 | 00712 | 00713 | 00714 | 00715 | 00716 | 00717 | 00718 | 00719 | 00720 | 00721 | 00722 | 00723 | 00724 | 00725 |   |
| <b>100 mg/m3</b>          |             | 6     | 7     | 8     | 9     | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 0     | 1     | 2     | 3     | 4 |
| <b>* TOTALS</b>           |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |   |

**ALIMENTARY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49 |
| Gallbladder                               | + | + | + | + | + | M | + | + | A | + | + | + | + | A | + | A | A | + | + | + | + | + | M | + | + | + | + | + | + | 44 |    |
| Histiocytic Sarcoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |    |
| Lymphoma Malignant                        |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |    |
| Intestine Large, Cecum                    | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | 45 |    |
| Intestine Large, Colon                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Intestine Large, Rectum                   | + | + | + | + | + | + | + | + | A | + | + | I | + | + | + | A | + | + | + | I | + | + | + | + | + | + | + | + | + | 45 |    |
| Intestine Small, Duodenum                 | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | 45 |    |
| Intestine Small, Ileum                    | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | 46 |    |
| Histiocytic Sarcoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 1  |    |
| Lymphoma Malignant                        |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Intestine Small, Jejunum                  | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 46 |    |
| Liver                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Carcinoma, Metastatic, Islets, Pancreatic | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Hepatocellular Adenoma                    | X |   |   |   |   |   |   |   | X | X |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   | 9  |    |
| Hepatocellular Adenoma, Multiple          |   |   |   |   |   | X |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   | X | X | X |   |   |   | 6  |    |
| Hepatocellular Carcinoma                  |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X | X |   |   | 9  |    |
| Hepatocellular Carcinoma, Multiple        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   | 3 |    |    |
| Histiocytic Sarcoma                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | 3  |    |
| Lymphoma Malignant                        |   |   | X |   |   |   |   |   |   |   | X |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   | 8  |    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0733        | 0673  | 0773  | 0773  | 0773  | 0673  | 0773  | 0363  | 0667  | 0773  | 0363  | 0363  | 0434  | 0363  | 0573  | 0773  | 0667  | 0773  | 0667  | 0773  | 0667  | 0773  |          |
| ANIMAL ID  | 00726       | 00727 | 00728 | 00729 | 00730 | 00731 | 00732 | 00733 | 00734 | 00735 | 00736 | 00737 | 00738 | 00739 | 00740 | 00741 | 00742 | 00743 | 00744 | 00745 | 00746 | 00747 |          |
| Mesentery  |             | +     |       |       | +     | +     |       |       | +     |       |       |       |       |       | +     | +     |       |       |       |       | +     | +     | 11       |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Hemangioma                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 1        |
| Lymphoma Malignant                               |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | 1        |
| Schwannoma Malignant, Metastatic, Heart          |             |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Pancreas   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3        |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       |       | X     |       |       | X     |       |       |       |       |       |       | 5        |
| Sarcoma, Metastatic, Skin                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | 1        |
| Salivary Glands                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |
| Stomach, Forestomach                             | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Stomach, Glandular                               | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3        |

**CARDIOVASCULAR SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Aorta, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |  |  |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|--|--|
|  | 0733        | 0673  | 0773  | 0773  | 0676  | 0773  | 0366  | 0673  | 0183  | 0183  | 0234  | 0175  | 0077  | 0177  | 0057  | 0077  | 0173  | 0066  | 0077  | 0077  | 0066  | 0077  | 0066  | 0077  |          |  |  |
| ANIMAL ID  | 00726       | 00726 | 00726 | 00726 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 | 00733 |          |  |  |
| Aorta, Histiocytic Sarcoma, Metastatic, Spleen   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |  |  |
| Heart  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |  |  |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |  |  |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       | 3        |  |  |
| Lymphoma Malignant                               |             |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |  |  |
| Endocardium, Schwannoma Malignant                |             |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |  |  |
| <b>ENDOCRINE SYSTEM</b>                          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |  |  |
| Adrenal Cortex                                   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |  |  |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |  |  |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2        |  |  |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |  |  |
| Subcapsular, Adenoma                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |  |  |
| Adrenal Medulla                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |  |  |
| Islets, Pancreatic Carcinoma                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |  |  |
|  | X           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |  |  |
| Parathyroid Gland                                | +           | M     | M     | M     | +     | +     | +     | +     | +     | M     | +     | M     | M     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | 28       |  |  |
| Pituitary Gland                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | 49       |  |  |
| Pars Distalis, Adenoma                           |             |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | X     |       |       | 6     |          |  |  |
| Pars Distalis, Carcinoma                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |  |  |
| Thyroid Gland                                    | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49    |          |  |  |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

|                    |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |
|--------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| B6C3F1 MICE FEMALE | 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 |   |
|                    |             | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 3 | 6 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 |          | 7 |
|                    |             | 3 | 7 | 3 | 3 | 3 | 9 | 3 | 1 | 8 | 3 | 3 | 4 | 3 | 7 | 3 | 1 | 7 | 3 | 3 | 3 | 3 | 8 |          | 3 |
| 100 mg/m3          | 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 | 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 |          |   |
|                    |             | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |          |   |
|                    |             | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1        |   |

Follicular Cell, Carcinoma, Multiple

1

### GENERAL BODY SYSTEM

NONE

### GENITAL SYSTEM

Clitoral Gland

+ M I + 46

Ovary

+ 50

Alveolar/Bronchiolar Carcinoma, Metastatic,  
Lung

1

Cystadenoma X

3

Granulosa Cell Tumor Benign

1

Histiocytic Sarcoma X

2

Lymphoma Malignant X 3

Periovarian Tissue, Alveolar/Bronchiolar  
Carcinoma, Metastatic, Lung X 1

Periovarian Tissue, Histiocytic Sarcoma 1

Periovarian Tissue, Sarcoma, Metastatic, Skin X 1

Uterus

+ 50

Carcinoma X 1

Hemangioma X 1

Histiocytic Sarcoma X 3

Lymphoma Malignant X 2

Polyp Stromal 1

### HEMATOPOIETIC SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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



Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                            | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0733        | 0673  | 0773  | 0773  | 0773  | 0673  | 0773  | 0363  | 0663  | 0773  | 0673  | 0773  | 0673  | 0573  | 0773  | 0773  | 0673  | 0673  | 0773  | 0773  | 0673  | 0773  | 0673  | 0773  |          |
| ANIMAL ID  | 00726       | 00727 | 00728 | 00729 | 00730 | 00731 | 00732 | 00733 | 00734 | 00735 | 00736 | 00737 | 00738 | 00739 | 00740 | 00741 | 00742 | 00743 | 00744 | 00745 | 00746 | 00747 | 00748 | 00749 |          |
| Bone Marrow  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50    |          |
| Histiocytic Sarcoma  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Lymphoma Malignant   |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Lymph Node   |             |       | +     |       |       |       |       |       |       |       |       |       |       | +     |       | +     |       |       |       |       | +     |       |       | 10    |          |
| Axillary, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Lumbar, Histiocytic Sarcoma                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Lumbar, Lymphoma Malignant                                 |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | 3     |          |
| Pancreatic, Hemangiosarcoma                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Pancreatic, Lymphoma Malignant                             |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |          |
| Renal, Alveolar/Bronchiolar Carcinoma, Metastatic, Lung    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Renal, Lymphoma Malignant                                  |             |       | X     |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       | 2     |          |
| Lymph Node, Bronchial                                      | +           | +     | +     | M     | I     | +     | M     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | I     | +     | 43    |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung           |             | X     |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 4     |          |
| Carcinoma, Metastatic, Harderian Gland                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |          |
| Histiocytic Sarcoma  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3     |          |
| Lymphoma Malignant   |             |       | X     |       |       |       |       |       |       |       |       |       | X     | X     | X     |       | X     | X     |       |       |       |       |       | 9     |          |
| Lymph Node, Mandibular                                     | M           | M     | +     | M     | +     | M     | M     | M     | +     | +     | +     | +     | M     | +     | +     | +     | +     | +     | M     | +     | +     | +     | +     | 39    |          |
| Histiocytic Sarcoma  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3     |          |
| Lymphoma Malignant   |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       | 4     |          |
| Lymph Node, Mediastinal                                    | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | M     | 45    |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung           |             | X     |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |          |
| Histiocytic Sarcoma  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3     |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |    | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----------|
|  | 0733        | 0673  | 0773  | 0773  | 0676  | 0773  | 0363  | 0667  | 0773  | 0363  | 0773  | 0667  | 0773  | 0573  | 0773  | 0667  | 0773  | 0667  | 0773  | 0667  | 0773  | 0667  | 0773  |    |          |
| ANIMAL ID  | 00726       | 00727 | 00728 | 00729 | 00730 | 00731 | 00732 | 00733 | 00734 | 00735 | 00736 | 00737 | 00738 | 00739 | 00740 | 00741 | 00742 | 00743 | 00744 | 00745 | 00746 | 00747 | 00748 |    |          |
| Lymphoma Malignant                               |             | X     |       |       |       |       |       |       |       |       | X     | X     | X     |       |       | X     | X     |       |       |       |       |       |       | 7  |          |
| Lymph Node, Mesenteric                           | +           | +     | +     | +     | +     | +     | +     | +     | A     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 48 |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3  |          |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       | X     |       |       |       | X     | X     |       |       |       |       |       |       | 7  |          |
| Sarcoma, Metastatic, Skin                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | 1  |          |
| Spleen   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49 |          |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       | 3  |          |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       | X     | X     | X     | X     |       | X     | X     |       |       |       |       |       |       | 11 |          |
| Thymus   | +           | +     | +     | +     | +     | I     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 49 |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2  |          |
| Histiocytic Sarcoma                              |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2  |          |
| Lymphoma Malignant                               |             |       | X     |       |       |       |       |       |       |       |       | X     | X     |       |       | X     |       |       |       |       |       |       |       | 5  |          |
| Sarcoma, Metastatic, Skin                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       | 1  |          |
| <b>INTEGUMENTARY SYSTEM</b>                      |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |    |          |
| Mammary Gland                                    | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50 |          |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |
| Histiocytic Sarcoma, Metastatic, Spleen          |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |
| Lymphoma Malignant, Metastatic, Spleen           |             |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |
| Skin   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50 |          |
| Schwannoma Benign                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |
| Subcutaneous Tissue, Fibrous Histiocytoma        |             |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       | 1  |          |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3                          | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|------|
|  | 0733        | 0673  | 0773  | 0773  | 0676  | 0773  | 0361  | 0667  | 0361  | 0773  | 0667  | 0773  | 0572  | 0773  | 0771  | 0667  | 0773  | 0667  | 0773  | 0773  | 0667  | 0773  | 0773  | 0667  |          | 0773 |
| ANIMAL ID  | 00726       | 00727 | 00728 | 00729 | 00730 | 00731 | 00732 | 00733 | 00734 | 00735 | 00736 | 00737 | 00738 | 00739 | 00740 | 00741 | 00742 | 00743 | 00744 | 00745 | 00746 | 00747 | 00748 | 00749 | 00750    |      |
| Subcutaneous Tissue, Sarcoma                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X        | 1    |
| <b>MUSCULOSKELETAL SYSTEM</b>                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |
| Bone   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |
| Mandible, Fibrosarcoma                                   |             |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |
| Skeletal Muscle  |             | +     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 4    |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung Sarcoma |             | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |
| <b>NERVOUS SYSTEM</b>                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |
| Brain  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |
| Lymphoma Malignant                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       | X     |       |       |       |       |       |       |          | 4    |
| Meninges, Histiocytic Sarcoma                            |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 1    |
| Peripheral Nerve   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2    |
| Spinal Cord  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          | 2    |
| <b>RESPIRATORY SYSTEM</b>                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |      |
| Larynx   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |
| Lymphoma Malignant                                       |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |          | 1    |
| Lung   | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | 50   |
| Alveolar/Bronchiolar Adenoma                             |             |       |       |       | X     |       |       |       |       | X     |       |       |       |       |       |       |       |       | X     |       | X     |       |       |       |          | 6    |
| Alveolar/Bronchiolar Adenoma, Multiple                   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |          | 2    |
| Alveolar/Bronchiolar Carcinoma                           | X           |       |       | X     |       |       |       |       |       |       | X     |       |       |       |       | X     | X     |       |       |       |       |       |       |       |          | 9    |

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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

Experiment Number: 20523 - 04

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Metal Working Fluids: Trim VX

CAS Number: TRIMVX

Date Report Requested: 02/02/2015

Time Report Requested: 13:50:12

First Dose M/F: 08/03/09 / 08/03/09

Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3   |  | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      |      |
|---|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------------------|------|------|------|------|------|
|   |  | 0733        | 0673 | 0773 | 0773 | 0676 | 0773 | 0368 | 0671 | 0773 | 0368 | 0773 | 0676 | 0773 | 0577 | 0773 | 0771 | 0676 | 0773 | 0676 | 0773 |      | 0676 | 0773 | 0776 | 0773 | 0776 | 0773 | 0773 | 0776                                  | 0773 | 0773 |      |      |      |
| ANIMAL ID   |  | 0072        | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072 | 0077 | 0072                                  | 0077 | 0072 | 0077 | 0072 | 0077 |
|   |  | 6           | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4                                     | 5    | 6    | 7    | 8    | 9    |
|   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS                              |      |      |      |      |      |
| Alveolar/Bronchiolar Carcinoma, Multiple  |  | X           |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      | X    | 5    |      |      |
| Carcinoma, Metastatic, Harderian Gland  |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      | 1    |
| Hepatocellular Carcinoma, Metastatic, Liver                                       |  | X           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       | X    |      | 3    |      |      |
| Histiocytic Sarcoma   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       | X    |      |      | 3    |      |
| Lymphoma Malignant  |  |             |      | X    |      |      |      |      |      |      |      | X    |      | X    | X    |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 8    |      |
| Sarcoma, Metastatic, Skin   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |                                       |      |      |      | 1    |      |
| Nose  |  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                                     | +    | +    | +    | 50   |      |
| Carcinoma, Metastatic, Harderian Gland  |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      | 1    |
| Histiocytic Sarcoma   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X                                     |      |      |      | 1    |      |
| Trachea   |  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                                     | +    | +    | 49   |      |      |
| Lymphoma Malignant  |  |             |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 1    |      |
| SPECIAL SENSES SYSTEM   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      |      |
| Ear   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 1    |      |
| Eye   |  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                                     | +    | +    | 50   |      |      |
| Harderian Gland   |  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | A    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                                     | +    | 49   |      |      |      |
| Adenoma   |  |             |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 4    |      |
| Carcinoma   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 5    |      |
| Lymphoma Malignant  |  |             |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 1    |      |
| URINARY SYSTEM  |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      |      |
| Kidney  |  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +                                     | +    | +    | 50   |      |      |
| Alveolar/Bronchiolar Carcinoma, Metastatic, Lung                                  |  |             |      |      |      |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      | 2    |      |
| Histiocytic Sarcoma   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |                                       |      |      |      | 3    |      |
| * .. Total animals with tissue examined microscopically; Total animals with tumor |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | M .. Missing tissue                   |      |      |      |      |      |
| + .. Tissue examined microscopically  |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | A .. Autolysis precludes evaluation   |      |      |      |      |      |
| X .. Lesion present   |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | BLANK .. Not examined microscopically |      |      |      |      |      |
| I .. Insufficient tissue  |  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                       |      |      |      |      |      |

Experiment Number: 20523 - 04  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: MICE/B6C3F1

P04: NEOPLASMS BY INDIVIDUAL ANIMAL  
 Metal Working Fluids: Trim VX  
 CAS Number: TRIMVX

Date Report Requested: 02/02/2015  
 Time Report Requested: 13:50:12  
 First Dose M/F: 08/03/09 / 08/03/09  
 Lab: BNW

| B6C3F1 MICE FEMALE<br>100 mg/m3         | DAY ON TEST |      | ANIMAL ID |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |      |      |      |    |
|---|-------------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|------|----|
|   | 0733        | 0673 | 0773      | 0773 | 0676 | 0773 | 0366 | 0673 | 0183 | 0183 | 0254 | 0673 | 0573 | 0773 | 0373 | 0173 | 0573 | 0673 | 0773 | 0373 | 0373 | 0473 |          | 0773 | 0673 | 0773 |    |
| Lymphoma Malignant                      |             |      | X         |      |      |      |      |      |      |      |      | X    | X    | X    | X    |      |      |      |      |      |      |      |          |      |      |      | 7  |
| Sarcoma, Metastatic, Skin               |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |          |      |      |      | 1  |
| Schwannoma Malignant, Metastatic, Heart |             |      |           |      | X    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      | 1  |
| Urinary Bladder                         | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | 50 |
| Histiocytic Sarcoma                     |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X        |      |      |      | 3  |
| Lymphoma Malignant                      |             |      | X         |      |      |      |      |      |      |      |      |      |      |      | X    |      |      |      |      |      |      |      |          |      |      |      | 5  |
| <b>SYSTEMIC LESIONS</b>                 |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |      |    |
| Multiple Organ                          | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        | +    | +    | +    | 50 |
| Histiocytic Sarcoma                     |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | X        |      |      |      | 3  |
| Lymphoma Malignant                      |             |      | X         |      |      |      |      |      |      |      |      | X    | X    | X    | X    | X    | X    |      |      |      |      |      |          |      |      |      | 12 |

\*\*\* END OF REPORT \*\*\*

\* .. Total animals with tissue examined microscopically; Total animals with tumor  
 + .. Tissue examined microscopically  
 X .. Lesion present  
 I .. Insufficient tissue

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