

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/21/2008

Time Report Requested: 07:18:30

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

F1_M3

C Number: C20515

Lock Date: 04/04/2007

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 2.0.0

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
0 mg/m3		0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	M	+	+	+	+	+	+	+	9
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Cyst			3								1 3.0
Inflammation, Chronic			2								1 2.0
Parasite Metazoan			X								1
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
B6C3F1 MICE MALE	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
0 mg/m3										* TOTALS

Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	-----------

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	M	+	+	+	+	+	+	+	+	+	9
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

GENERAL BODY SYSTEM

NONE

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		9	9	9	9	9	9	9	9	9	9
DAY ON TEST		5	5	5	5	5	5	5	5	5	5
B6C3F1 MICE MALE		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0
0 mg/m3		0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	+	+	I	M	M	+	7
Lymph Node, Mandibular	M	I	M	+	+	+	+	+	M	M	5
Lymph Node, Mediastinal	M	M	M	M	M	M	M	+	M	+	2
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10

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	DAY ON TEST										
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE										
	ANIMAL ID										
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
0 mg/m3	1	2	3	4	5	6	7	8	9	0	
											* TOTALS
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
INTEGUMENTARY SYSTEM											
Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
RESPIRATORY SYSTEM											
Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	
B6C3F1 MICE MALE		0	0	0	0	0	0	0	0	0	0	
0 mg/m3		0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	* TOTALS
Nose		+	+	+	+	+	+	+	+	+	+	10
Trachea		+	+	+	+	+	+	+	+	+	+	10
SPECIAL SENSES SYSTEM												
Eye		+	+	+	+	+	+	+	+	+	+	10
Harderian Gland		+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM												
Kidney		+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Regeneration								1				1 1.0
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
.....												
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
25 mg/m3		2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
25 mg/m3		2	2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2	10 2.0
Squamous Epithelium, Hyperplasia							1				1 1.0
Lung	+	+	+	+	+	+	+	+	+	+	10
Bronchiole, Hyperplasia	1	1	1	1	1	1	1	1	1	1	10 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet			1	1	1	1		1	1	1	7 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet			1	1	1	1	1	1	1	1	8 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

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 Page 8

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/21/2008

Time Report Requested: 07:18:30

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	
.....											
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
25 mg/m3		2	2	2	2	2	2	2	2	2	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	* TOTALS

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
50 mg/m3		4	4	4	4	4	4	4	4	4	4	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active		2	1	1	1							4 1.3
Metaplasia, Squamous	2	3	2	3	2	2	2	2	2	2		10 2.2
Lung	+	+	+	+	+	+	+	+	+	+	10	
Bronchiole, Hyperplasia	1	1	1	1	1	1	1	1	1	1		10 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10	
Olfactory Epithelium, Accumulation, Hyaline Droplet			1				1	1		1		4 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1		10 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10	

SPECIAL SENSES SYSTEM

NONE

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
.....												
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
50 mg/m3		4	4	4	4	4	4	4	4	4	4	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

URINARY SYSTEM

NONE

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
.....												
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
100 mg/m3		6	6	6	6	6	6	6	6	6	6	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
100 mg/m3		6	6	6	6	6	6	6	6	6	6	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active				1	2	1	1		1	2	6 1.3
Metaplasia, Squamous	3	3	3	3	2	3	3	3	3	3	10 2.9
Lung	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Histiocyte									1		1 1.0
Arteriole, Hypertrophy	1								1		2 1.0
Bronchiole, Hyperplasia	2	2	2	2	1	2	2	2	2	2	10 1.9
Perivascular, Inflammation, Chronic Active	1								1	1	3 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	1	2	2	2	10 1.9
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	10 2.0
Trachea	+	+	+	+	+	+	+	+	+	+	10

SPECIAL SENSES SYSTEM

NONE

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

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Time Report Requested: 07:18:30

First Dose M/F: 06/12/06 / 06/12/06

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
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5

B6C3F1 MICE MALE

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
	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

* TOTALS

URINARY SYSTEM

NONE

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

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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
200 mg/m3		8	8	8	8	8	8	8	8	8	8	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2	2	2	2	2	2	2	2	1	2		10 1.9
Metaplasia, Squamous	3	4	4	4	4	4	4	4	4	4		10 3.9
Squamous Epithelium, Hyperplasia			2	2	2	2	2	2		1		7 1.9
Lung	+	+	+	+	+	+	+	+	+	+	10	
Infiltration Cellular, Histiocyte							1					1 1.0
Arteriole, Hypertrophy	1					1	2					3 1.3
Bronchiole, Hyperplasia	2	1	1	2	1	2	2	1	2	1		10 1.5
Perivascular, Inflammation, Chronic Active	1					1	1		1			4 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10	
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	1	2	2	2	2	1	2	1		10 1.7
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	1	1	2	2	2	2	1	2	2		10 1.7
Trachea	+	+	+	+	+	+	+	+	+	+	10	

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2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
.....												
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
200 mg/m3		8	8	8	8	8	8	8	8	8	8	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

SPECIAL SENSES SYSTEM

Eye + 1

URINARY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE 400 mg/m3	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	+	+	+	+	+	+	+	+	+	M	9
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
B6C3F1 MICE MALE 400 mg/m3	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

Stomach, Glandular + + + + + + + + + + **10**

CARDIOVASCULAR SYSTEM

Heart + + + + + + + + + + **10**

ENDOCRINE SYSTEM

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

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

Islets, Pancreatic + + + + + + + + + + **10**

Parathyroid Gland + M M + M M + M M M **3**

Pituitary Gland + + + + + + + + + + **10**

Thyroid Gland + + + + + + + + + + **10**

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	5	5	5	5	5	5	5	5	5	5
B6C3F1 MICE MALE 400 mg/m3	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
* TOTALS										

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	+	+	M	+	M	+	M	M	+	M	5
Lymph Node, Mediastinal	+	M	M	+	+	M	I	+	M	+	5
Lymph Node, Mesenteric	+	+	+	+	M	+	+	+	+	+	9
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	
400 mg/m3		0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

INTEGUMENTARY SYSTEM

Mammary Gland	M	M	M	M	M	M	M	M	M	M	0
Skin	+	+	+	+	+	+	+	+	+	+	10

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	-----------

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	-----------

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2		2	2	1	2	2	2	2	2		9 1.9
Metaplasia, Squamous	4	4	4	4	4	4	4	4	4	4		10 4.0
Epiglottis, Dysplasia	1		2			2	2	2	2			6 1.8
Squamous Epithelium, Hyperplasia	2	2	2	3	2	2	3	2	2	2		10 2.2
Lung	+	+	+	+	+	+	+	+	+	+	10	
Infiltration Cellular, Histiocyte									1			1 1.0

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	* TOTALS
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	5	5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE 400 mg/m3	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	
Thrombosis, Focal Arteriole, Hypertrophy									1		1 1.0
Bronchiole, Hyperplasia		1		1	1					1	4 1.0
Perivascular, Inflammation, Chronic Active	2	1	2	2	2	2	2	2	2	2	10 1.9
		1		1	1		1		1	2	6 1.2
Nose	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Suppurative										1	1 1.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2		2	2	9 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	1	2	2	10 1.9
Trachea	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Suppurative									1		1 1.0
Epithelium, Metaplasia, Squamous			1								1 1.0
SPECIAL SENSES SYSTEM											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
URINARY SYSTEM											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Regeneration					1			2			2 1.5

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

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/21/2008

Time Report Requested: 07:18:30

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	5	
B6C3F1 MICE MALE		0	0	0	0	0	0	0	0	0	
	ANIMAL ID	1	1	1	1	1	1	1	1	1	
400 mg/m3		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0
											* TOTALS
Urinary Bladder		+	+	+	+	+	+	+	+	+	10

*** END OF MALE DATA ***

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		9	9	9	9	9	9	9	9	9	9
DAY ON TEST		6	6	6	6	6	6	6	6	6	6
B6C3F1 MICE FEMALE		0	0	0	0	0	0	0	0	0	0
0 mg/m3		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		1	1	1	1	1	1	1	1	1	1
ANIMAL ID		0	0	0	0	0	0	0	0	0	1
ANIMAL ID		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	M	M	M	+	M	+	+	+	+	M	5
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic		1									1 1.0
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		9	9	9	9	9	9	9	9	9	9
DAY ON TEST		6	6	6	6	6	6	6	6	6	6
B6C3F1 MICE FEMALE		0	0	0	0	0	0	0	0	0	0
0 mg/m3		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		1	1	1	1	1	1	1	1	1	1
ANIMAL ID		0	0	0	0	0	0	0	0	0	1
ANIMAL ID		1	2	3	4	5	6	7	8	9	0
* TOTALS											

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	10
--------------------	---	---	---	---	---	---	---	---	---	---	---	-----------

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	---	-----------

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	10
----------------	---	---	---	---	---	---	---	---	---	---	---	-----------

Adrenal Medulla	+	+	+	+	+	+	M	+	+	+	+	9
-----------------	---	---	---	---	---	---	---	---	---	---	---	----------

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	10
--------------------	---	---	---	---	---	---	---	---	---	---	---	-----------

Parathyroid Gland	+	+	+	M	M	+	+	+	M	M	+	6
-------------------	---	---	---	---	---	---	---	---	---	---	---	----------

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	---	-----------

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active						2						1 2.0

GENERAL BODY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
0 mg/m3		1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	+	M	+	+	+	+	+	9
Lymph Node, Mandibular	+	+	+	+	M	+	+	+	+	M	8
Lymph Node, Mediastinal	M	M	+	+	M	M	M	M	+	+	4
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		0	0	0	0	0	0	0	0	0	0
DAY ON TEST		9	9	9	9	9	9	9	9	9	9
DAY ON TEST		6	6	6	6	6	6	6	6	6	6
B6C3F1 MICE FEMALE		0	0	0	0	0	0	0	0	0	0
0 mg/m3		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		1	1	1	1	1	1	1	1	1	1
ANIMAL ID		0	0	0	0	0	0	0	0	0	1
ANIMAL ID		1	2	3	4	5	6	7	8	9	0
* TOTALS											

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	-----------

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	-----------

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
0 mg/m3		1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	10
Renal Tubule, Regeneration								1			1 1.0
Urinary Bladder	+	+	+	+		+	+	+	+	+	9

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 | .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked
 Page 29

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
.....												
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
25 mg/m3		3	3	3	3	3	3	3	3	3	3	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
25 mg/m3		3	3	3	3	3	3	3	3	3	3	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2	10 2.0
Lung	+	+	+	+	+	+	+	+	+	+	10
Bronchiole, Hyperplasia	1	1	1	1	1	1	1	1	1	1	10 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet		1	1			1	1	1	1	1	7 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1	10 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
.....												
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
50 mg/m3		5	5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	6	6	6	6	6	6	6	6	6	6
B6C3F1 MICE FEMALE	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	5
	0	0	0	0	0	0	0	0	0	1
50 mg/m3	1	2	3	4	5	6	7	8	9	0
* TOTALS										

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active									1		1 1.0
Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2	10 2.0
Lung	+	+	+	+	+	+	+	+	+	+	10
Bronchiole, Hyperplasia	1	1	1	1	1	1	1	1	1	1	10 1.0
Perivascular, Inflammation, Chronic Active	1										1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1	10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1	10 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20515 - 02

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (CIMSTAR 3800)

CAS Number: CIMSTAR3800

Date Report Requested: 10/21/2008

Time Report Requested: 07:18:30

First Dose M/F: 06/12/06 / 06/12/06

Lab: BNW

	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	
.....											
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
50 mg/m3		5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	* TOTALS
.....											
NONE											

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
100 mg/m3		7	7	7	7	7	7	7	7	7	7	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Spleen + 1

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
100 mg/m3		7	7	7	7	7	7	7	7	7	7	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2	2	1	1		1	1	2	1	1		9 1.3
Metaplasia, Squamous	3	3	3	3	3	3	2	2	3	3		10 2.8
Squamous Epithelium, Hyperplasia				1								1 1.0
Lung	+	+	+	+	+	+	+	+	+	+	10	
Infiltration Cellular, Histiocyte								1				1 1.0
Arteriole, Hypertrophy				1				1				2 1.0
Bronchiole, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Perivascular, Inflammation, Chronic Active	1	1	1	1	1			1				6 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10	
Olfactory Epithelium, Accumulation, Hyaline Droplet	1	2	2	2	2	2	2	1	2	2		10 1.8
Respiratory Epithelium, Accumulation, Hyaline Droplet	1	2	2	2	2	2	2	1	2	2		10 1.8
Trachea	+	+	+	+	+	+	+	+	+	+	10	

SPECIAL SENSES SYSTEM

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

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
.....												
B6C3F1 MICE FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
200 mg/m3		9	9	9	9	9	9	9	9	9	9	
		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	6	6	6	6	6	6	6	6	6	6
B6C3F1 MICE FEMALE	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
200 mg/m3										* TOTALS

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2	3	2	2	2	2	2	2	2	2		10 2.1
Metaplasia, Squamous	4	4	4	4	4	4	4	4	4	3		10 3.9
Epiglottis, Dysplasia	1	1										2 1.0
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Lung	+	+	+	+	+	+	+	+	+	+	10	
Arteriole, Hypertrophy				1	1	1			1			4 1.0
Bronchiole, Hyperplasia	2	2	2	2	2	2	1	2	2	1		10 1.8
Perivascular, Inflammation, Chronic Active	1	1	1	1	1	1			1	1		8 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10	
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Trachea	+	+	+	+	+	+	+	+	+	+	10	

SPECIAL SENSES SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	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	
400 mg/m3		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Gallbladder	M	+	+	+	+	M	+	+	+	+	8
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum Inflammation, Suppurative	+	+	+	+	+	+	+	+	+	+	10 1 1.0
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10

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x .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE		0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	1	1	1	1	1	1	1	1	1	1	
		1	1	1	1	1	1	1	1	1	1	
400 mg/m3		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

Stomach, Glandular

+ + + + + + + + + +

10

CARDIOVASCULAR SYSTEM

Heart

+ + + + + + + + + +

10

ENDOCRINE SYSTEM

Adrenal Cortex

+ + + + + + + + + +

10

Adrenal Medulla

+ + + + + + + + + +

10

Islets, Pancreatic

+ + + + + + + + + +

10

Parathyroid Gland

M M M M M + M + M +

3

Pituitary Gland

+ + + + + + + + + +

10

Thyroid Gland

+ + + + + + + + + +

10

GENERAL BODY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	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	
400 mg/m3		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

GENITAL SYSTEM

Clitoral Gland	+	M	+	+	+	+	+	+	+	+	9
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	+	M	+	+	M	M	+	+	7
Lymph Node, Mandibular	+	+	+	+	+	M	+	+	+	+	9
Lymph Node, Mediastinal	M	M	M	M	M	M	+	+	I	M	2
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

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 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	9	
		6	6	6	6	6	6	6	6	6	6	
B6C3F1 MICE FEMALE	ANIMAL ID	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	
400 mg/m3		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	-----------

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	-----------

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2	2	2	2	2	2	2	2	2	2		10 2.0
Metaplasia, Squamous	4	4	4	4	4	4	4	4	4	4		10 4.0
Epiglottis, Dysplasia	1	1	2	2	2	2			2			7 1.7
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Lung	+	+	+	+	+	+	+	+	+	+	10	
Arteriole, Hypertrophy				1			1					2 1.0
Bronchiole, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	9	
	6	6	6	6	6	6	6	6	6	6	6	
.....												
B6C3F1 MICE FEMALE	0	0	0	0	0	0	0	0	0	0	0	
400 mg/m3	1	1	1	1	1	1	1	1	1	1	1	
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0		* TOTALS

Perivascular, Inflammation, Chronic Active		1		1			1					3 1.0

Nose		+	+	+	+	+	+	+	+	+	+	10
Olfactory Epithelium, Accumulation, Hyaline Droplet		2	2	2	2	2	2	2	2	2	2	10 2.0
Respiratory Epithelium, Accumulation, Hyaline Droplet		2	2	2	2	2	2	2	2	2	2	10 2.0

Trachea		+	+	+	+	+	+	+	+	+	+	10
Epithelium, Metaplasia, Squamous							1					1 1.0

SPECIAL SENSES SYSTEM												

Eye		+	+	+	+	+	+	+	+	+	+	10

Harderian Gland		+	+	+	+	+	+	+	+	+	+	10

URINARY SYSTEM												

Kidney		+	+	+	+	+	+	+	+	+	+	10

Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10

*** END OF REPORT ***

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked