

TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

Lab: BNW

F1_RD

C Number: C20516
Lock Date: 05/16/2007
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
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
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		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Arteriole, Inflammation, Chronic Active							1	1			2 1.0
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active		1	1	1	1	1	1	1			7 1.0
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

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
	3	3	3	3	3	3	3	3	3	3
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
0 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10
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CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1	1	1	1		2	2	1	2	2	9 1.4

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
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
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
<hr/>										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
0 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active						2						1 2.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10	
Prostate	+	+	+	+	+	+	+	+	+	+	10	
Hyperplasia, Focal	1											1 1.0
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10	
Testes	+	+	+	+	+	+	+	+	+	+	10	

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Bronchial	+	M	+	+	+	+	+	+	+	M	8	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	M	9	
Hyperplasia					2							1 2.0
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	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	
		3	3	3	3	3	3	3	3	3	3	
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0	
MALE		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		0	0	0	0	0	0	0	0	0	1	
		1	2	3	4	5	6	7	8	9	0	* TOTALS
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	10
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
Meninges, Inflammation, Focal, Chronic Active							1					1 1.0
RESPIRATORY SYSTEM												

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0		
FISCHER 344-TACONIC RATS 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		1	2	3	4	5	6	7	8	9	0	* TOTALS	
Larynx		+	+	+	+	+	+	+	+	+	+	10	
Erosion			1						1				2 1.0
Inflammation, Acute			1				2	1	1				4 1.3
Ulcer							2	1					2 1.5
Lung		+	+	+	+	+	+	+	+	+	+	10	
Cyst										2			1 2.0
Inflammation, Granulomatous						1							1 1.0
Inflammation, Chronic Active		2	1	1		1	2	2	1	1	1		9 1.3
Arteriole, Mineralization						1			1				2 1.0
Nose		+	+	+	+	+	+	+	+	+	+	10	
Trachea		+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active					1								1 1.0
SPECIAL SENSES SYSTEM													
Eye		+	+	+	+	+	+	+	+	+	+	10	
Harderian Gland		+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active						1		1					2 1.0
URINARY SYSTEM													
Kidney		+	+	+	+	+	+	+	+	+	+	10	
Nephropathy			1	1	1			1	2	1	1		7 1.1

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Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
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	1
		1	2	3	4	5	6	7	8	9	0
* TOTALS											
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
		3	3	3	3	3	3	3	3	3	3
.....											
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
	MALE	0	0	0	0	0	0	0	0	0	0
	ANIMAL ID	2	2	2	2	2	2	2	2	2	2
25 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

.....											
Liver											
Hepatodiaphragmatic Nodule						+					1
						2					1
											2.0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY 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	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	
25 mg/m3	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			1	1		1		1	1	1		6 1.0
Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2		10 2.0
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
Alveolus, Infiltration Cellular, Histiocyte						1		1				2 1.0
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0

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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		3	3	3	3	3	3	3	3	3	3
.....											
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
MALE		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		2	2	2	2	2	2	2	2	2	2
25 mg/m3		0	0	0	0	0	0	0	0	0	1
ANIMAL ID		1	2	3	4	5	6	7	8	9	0
											* TOTALS
Trachea		+	+	+	+	+	+	+	+	+	+
											10

SPECIAL SENSES SYSTEM

NONE

URINARY SYSTEM

NONE

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2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	4	4	4	4	4	4	4	4	4	4	
	0	0	0	0	0	0	0	0	0	1	
50 mg/m3	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
	3	3	3	3	3	3	3	3	3	3
<hr/>										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
50 mg/m3	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	
Erosion				2					1			2 1.5
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
Metaplasia, Squamous	2	2	2	3	3	2	3	3	2	2		10 2.4
Squamous Epithelium, Hyperplasia	1			1		1				1		4 1.0
<hr/>												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
<hr/>												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	1	2	2	2	2		10 1.9
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
<hr/>												
Trachea	+	+	+	+	+	+	+	+	+	+	10	

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	0	0	0	0	0	0	0	0	0	0
DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
50 mg/m3	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										* TOTALS

SPECIAL SENSES SYSTEM

NONE

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	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	6	6	6	6	6	6	6	6	6	6	
100 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

Liver											+	
Hepatodiaphragmatic Nodule											1	1 1.0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY 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
	3	3	3	3	3	3	3	3	3	3
<hr/>										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	6	6	6	6	6	6	6	6	6	6
100 mg/m3	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	
Erosion					1							1 1.0
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
Metaplasia, Squamous	4	3	3	3	3	4	3	3	3	3		10 3.2
Mineralization						1						1 1.0
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	3	2		10 2.1
<hr/>												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	2	1	1	1		10 1.1
Metaplasia, Osseous				1								1 1.0
<hr/>												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	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

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20516 - 01

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 08/25/2008

Test Type: 90-DAY

Metal working fluids (Trim SC210)

Time Report Requested: 10:19:53

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: TRIMSC210

First Dose M/F: 08/14/06 / 08/14/06

Species/Strain: RATS/F344/N Tac

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	
	3	3	3	3	3	3	3	3	3	3	
<hr/>											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
100 mg/m3	6	6	6	6	6	6	6	6	6	6	
ANIMAL ID	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	* TOTALS
<hr/>											
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1	10 1.0
<hr/>											
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

	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	8	8	8	8	8	8	8	8	8	8	
	0	0	0	0	0	0	0	0	0	1	
200 mg/m3	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

Lymph Node, Mediastinal	+										1
Congestion	2										1 2.0

INTEGUMENTARY 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
	3	3	3	3	3	3	3	3	3	3
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	8	8	8	8	8	8	8	8	8	8
200 mg/m3	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	2	2	2	2	2	2	2	2		10 1.9
Metaplasia, Squamous	3	4	4	3	3	4	4	4	4	4		10 3.7
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
Alveolus, Infiltration Cellular, Histiocyte	1	1	1	1	1	1	1	1	1	1		10 1.0
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 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

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

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	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	8	8	8	8	8	8	8	8	8	8	
	0	0	0	0	0	0	0	0	0	1	
200 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

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
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
MALE		1	1	1	1	1	1	1	1	1	1
ANIMAL ID		0	0	0	0	0	0	0	0	0	0
400 mg/m3		1	2	3	4	5	6	7	8	9	0
* TOTALS											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Arteriole, Inflammation, Chronic Active							1		1		2 1.0
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule								1			1 1.0
Inflammation, Chronic Active				1	1			1	1		4 1.0
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

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
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
MALE		1	1	1	1	1	1	1	1	1	1
ANIMAL ID		0	0	0	0	0	0	0	0	0	0
400 mg/m3		1	2	3	4	5	6	7	8	9	0
* TOTALS											

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

CARDIOVASCULAR SYSTEM

Blood Vessel												1
Heart	+	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1			2	3	2	2	2	1	2		8 1.9

ENDOCRINE SYSTEM

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

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

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
	3	3	3	3	3	3	3	3	3	3
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
400 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active				1							1 1.0
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	M	M	+	+	+	M	+	+	+	+	7
Lymph Node, Mandibular	+	+	+	+	+	M	+	+	+	+	9
Ectasia				3							1 3.0

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

+ .. Tissue examined microscopically

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M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 22

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	
FISCHER 344-TACONIC RATS MALE		0	0	0	0	0	0	0	0	0	0	
ANIMAL ID		1	1	1	1	1	1	1	1	1	1	
400 mg/m3		0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	* TOTALS
Lymph Node, Mediastinal		+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	10
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
Meninges, Inflammation, Focal, Chronic Active							1					1 1.0

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

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
	3	3	3	3	3	3	3	3	3	3
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
MALE	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
400 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	2	2	2	2	2	2	2	1	2	2		10 1.9
Metaplasia, Squamous	4	2	4	4	4	4	4	4	4	4		10 3.8
Squamous Epithelium, Hyperplasia	4	2	4	4	3	4	4	3	2	4		10 3.4
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	2	1	2	1	2	1	1	1		10 1.3
Metaplasia, Osseous			1					1				2 1.0
Alveolus, Infiltration Cellular, Histiocyte	1	1	1	2	1	1	1	1	1	1		10 1.1
Arteriole, Mineralization			1				1					2 1.0
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	3	2	2	2	2	2	2	2	2	2		10 2.1
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
.....												
Trachea	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active						1						1 1.0

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	
	3	3	3	3	3	3	3	3	3	3	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
MALE	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	0	0	0	0	1	
400 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	10 1 1.0

URINARY SYSTEM

Kidney Nephropathy	+	+	+	+	+	+	+	+	+	+	10 6 1.0
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
 Page 25

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	4	4	4	4	4	4	4	4	4	4
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1
0 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
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	1	1	1		1	1	2	2		1	8 1.3
Mesentery							+				1
Fat, Necrosis							1				1 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Atrophy				1						1	2 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

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
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
FEMALE		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		1	1	1	1	1	1	1	1	1	1
0 mg/m3		0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0
* TOTALS											

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

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy								1		1	2 1.0

ENDOCRINE SYSTEM

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

GENERAL BODY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
 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
	4	4	4	4	4	4	4	4	4	4
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	1	1	1	1	1	1	1	1	1	1
0 mg/m3	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										* TOTALS

NONE

GENITAL SYSTEM

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	M	M	M	+	+	M	M	M	M	+	3
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	10
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
 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
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0
FEMALE		0	0	0	0	0	0	0	0	0	0
ANIMAL ID		1	1	1	1	1	1	1	1	1	1
0 mg/m3		0	0	0	0	0	0	0	0	0	0
		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					1						1	1.0
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	2	2	1	1	1	1	1	1	10	10 1.2
Nose	+	+	+	+	+	+	+	+	+	+	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	0	0	
	9	9	9	9	9	9	9	9	9	9	9	
	4	4	4	4	4	4	4	4	4	4	4	
<hr/>												
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	
ANIMAL ID	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
Inflammation, Chronic Active											1	1 1.0
Trachea	+	+	+	+	+	+	+	+	+	+		10
<hr/>												
SPECIAL SENSES SYSTEM												
Eye	+	+	+	+	+	+	+	+	+	+		10
Harderian Gland	+	+	+	+	+	+	+	+	+	+		10
Inflammation, Chronic Active										1		1 1.0
<hr/>												
URINARY SYSTEM												
Kidney	+	+	+	+	+	+	+	+	+	+		10
Urinary Bladder	+	+	+	+	+	+	+	+	+	+		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	
	4	4	4	4	4	4	4	4	4	4	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	1	
25 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

ALIMENTARY SYSTEM

Liver	+	+		+				+	+		5
Hepatodiaphragmatic Nodule	2	1		1				2	2		5 1.6

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary								+			1
Cyst								1			1 1.0

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	4	4	4	4	4	4	4	4	4	4	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	1	
25 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	2		1	1	1	1		9 1.1
Metaplasia, Squamous	2	1	1	2	2	1	1	2	2	2		10 1.6
Squamous Epithelium, Hyperplasia	1			1		1	1	1		1		6 1.0
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	2	2	1	2	1	1	1		10 1.3
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation,	1	1	1	1	1	1	1	1	1	1		10 1.0

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

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
	4	4	4	4	4	4	4	4	4	4

FISCHER 344-TACONIC RATS
FEMALE

ANIMAL ID

25 mg/m3

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

* TOTALS

Suppurative

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

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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
	4	4	4	4	4	4	4	4	4	4
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	5	5	5	5	5	5	5	5	5	5
50 mg/m3	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	1	1	1	1	1	1	1	1	1	1		9 1.0
Metaplasia, Squamous	2	2	2	2	2	4	1	2	2	2		10 2.1
Squamous Epithelium, Hyperplasia	1	1	1			1						4 1.0
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		10 1.0
Alveolus, Infiltration Cellular, Histiocyte										1		1 1.0
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Respiratory Epithelium, Inflammation,	1	1	1	1	1	1	1	1	1	1		10 1.0

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

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
	4	4	4	4	4	4	4	4	4	4

FISCHER 344-TACONIC RATS
FEMALE

ANIMAL ID

50 mg/m3

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

* TOTALS

Suppurative

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

Page 36

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	
	4	4	4	4	4	4	4	4	4	4	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	
100 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

Liver											
Hepatodiaphragmatic Nodule											1
											1 1.0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary											
Cyst											1
											1 2.0

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	4	4	4	4	4	4	4	4	4	4	
.....											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	1	
100 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	1	1	1	1	2	1	2	2		10 1.3
Metaplasia, Squamous	3	3	3	3	2	2	3	3	3	3		10 2.8
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	3	2		10 2.1
.....												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	1	1	2	1	1	1	1	1	1	2		10 1.2
Metaplasia, Osseous			1		1							2 1.0
.....												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		10 1.0
Respiratory Epithelium, Accumulation, Hyaline Droplet	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

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
	4	4	4	4	4	4	4	4	4	4
<hr/>										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	7
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
100 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS
Respiratory Epithelium, Inflammation, Suppurative	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
	4	4	4	4	4	4	4	4	4	4
.....										
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
200 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

ALIMENTARY SYSTEM

Liver											+			1
Hepatodiaphragmatic Nodule											2			1 2.0

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

Adrenal Cortex														+			1
----------------	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	---

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Ovary																		+			1
Cyst																			1		1 1.0

HEMATOPOIETIC 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
	4	4	4	4	4	4	4	4	4	4

FISCHER 344-TACONIC RATS 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
200 mg/m3	1	2	3	4	5	6	7	8	9	0

*** TOTALS**

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

NONE

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	2	2	2	2	2	2	2	2	2	2	10 2.0
Metaplasia, Squamous	3	3	3	3	3	3	4	3	3	3	10 3.1
Squamous Epithelium, Hyperplasia	2	2	3	3	2	2	2	3	3	2	10 2.4
Lung	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	1	1	2	1	1	2	2	1	1	1	10 1.3
Metaplasia, Osseous								1			1 1.0
Alveolus, Infiltration Cellular, Histiocyte		1	1	1	1	1	1		1	1	8 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2	10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	10 2.0
Olfactory Epithelium, Inflammation,	1	1	1	1	1	1	1	1	1	1	10 1.0

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

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	0	0	
	9	9	9	9	9	9	9	9	9	9	9	
	4	4	4	4	4	4	4	4	4	4	4	
<hr/>												
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	0	
FEMALE	0	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	1
200 mg/m3	1	2	3	4	5	6	7	8	9	0		* TOTALS
<hr/>												
Suppurative Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	2	10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1	1	10 1.0
<hr/>												
Trachea Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	10 2 1.0

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

Page 42

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
	4	4	4	4	4	4	4	4	4	4
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0
FEMALE	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1
ANIMAL ID	0	0	0	0	0	0	0	0	0	1
400 mg/m3	1	2	3	4	5	6	7	8	9	0
										* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Arteriole, Inflammation, Chronic Active						1					1 1.0
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Basophilic Focus							3				1 3.0
Hepatodiaphragmatic Nodule				2			2				2 2.0
Inflammation, Chronic Active	2	1	1		1	2		1	1	2	8 1.4
Necrosis, Focal, Chronic			2								1 2.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10

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x .. Lesion present

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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
		4	4	4	4	4	4	4	4	4	4
FISCHER 344-TACONIC RATS FEMALE		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
	ANIMAL ID	0	0	0	0	0	0	0	0	0	1
	400 mg/m3	1	2	3	4	5	6	7	8	9	0
* TOTALS											

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

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy							1				1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Accessory Adrenal Cortical Nodule					2						1 2.0
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	M	+	+		9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	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	
	4	4	4	4	4	4	4	4	4	4	
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	
ANIMAL ID	0	0	0	0	0	0	0	0	0	1	
400 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Cyst	2			1							2 1.5
Uterus	+	+	+	+	+	+	+	+	+	+	10
Endometrium, Hyperplasia							1				1 1.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Bronchial	+	+	M	M	M	M	M	+	+	+	5
Lymph Node, Mandibular	+	+	+	M	+	+	+	+	+	+	9
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	10
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	
	4	4	4	4	4	4	4	4	4	4	
<hr/>											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
400 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<hr/>											
INTEGUMENTARY SYSTEM											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<hr/>											
MUSCULOSKELETAL SYSTEM											
Bone	+	+	+	+	+	+	+	+	+	+	10
<hr/>											
NERVOUS SYSTEM											
Brain	+	+	+	+	+	+	+	+	+	+	10
<hr/>											
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	3	4	3	10 3.8
Squamous Epithelium, Hyperplasia	4	3	4	4	4	4	3	2	4	1	10 3.3

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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	
	4	4	4	4	4	4	4	4	4	4	
<hr/>											
FISCHER 344-TACONIC RATS	0	0	0	0	0	0	0	0	0	0	
FEMALE	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	1	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
400 mg/m3	1	2	3	4	5	6	7	8	9	0	* TOTALS
<hr/>											
Lung	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active		2	2	2	1	2	2	2	1	1	9 1.7
Alveolus, Infiltration Cellular, Histiocyte	1	1	1	1	1	1	1	1	1	1	10 1.0
Arteriole, Mineralization	1										1 1.0
<hr/>											
Nose	+	+	+	+	+	+	+	+	+	+	10
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2	10 2.0
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	10 2.0
Olfactory Epithelium, Inflammation, Suppurative	1	1	2	1	1	1	1	1	1	1	10 1.1
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	10 2.0
Respiratory Epithelium, Inflammation, Suppurative	1	1	2	1	1	1	1	1	1	1	10 1.1
<hr/>											
Trachea	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active				1							1 1.0
<hr/>											
SPECIAL SENSES SYSTEM											
<hr/>											
Eye	+	+	+	+	+	+	+	+	+	+	10
<hr/>											
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Chronic Active	1									1	2 1.0
<hr/>											
URINARY SYSTEM											
<hr/>											

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TDMS No. 20516 - 01

Test Type: 90-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F344/N Tac

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Metal working fluids (Trim SC210)

CAS Number: TRIMSC210

Date Report Requested: 08/25/2008

Time Report Requested: 10:19:53

First Dose M/F: 08/14/06 / 08/14/06

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	
FISCHER 344-TACONIC RATS		0	0	0	0	0	0	0	0	0	0	
FEMALE		1	1	1	1	1	1	1	1	1	1	
ANIMAL ID		1	1	1	1	1	1	1	1	1	1	
400 mg/m3		0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	* TOTALS
Kidney		+	+	+	+	+	+	+	+	+	+	10
Nephropathy			1									1 1.0
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	10

*** END OF REPORT ***

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