

**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
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Arteriole, Inflammation, Chronic Active							1	1			<b>2 1.0</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active		1	1	1	1	1	1	1			<b>7 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>
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**CARDIOVASCULAR SYSTEM**

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Cardiomyopathy	1	1	1	1		2	2	1	2	2	<b>9 1.4</b>

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**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  
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 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked  
 Page 3

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

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FISCHER 344-TACONIC RATS 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
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 Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	10	1 2.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10	
Prostate Hyperplasia, Focal	+	+	+	+	+	+	+	+	+	+	10	1 1.0
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10	
Testes	+	+	+	+	+	+	+	+	+	+	10	

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Bronchial	+	M	+	+	+	+	+	+	+	M	8	
Lymph Node, Mandibular Hyperplasia	+	+	+	+	+	+	+	+	+	M	9	1 2.0
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	10	

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1-4 .. Lesion qualified as:

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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
Lymph Node, Mesenteric		+	+	+	+	+	+	+	+	+	+	10
Spleen		+	+	+	+	+	+	+	+	+	+	10
Thymus		+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland		M	M	M	M	M	M	M	M	M	M	0
Skin		+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone		+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>												
Brain		+	+	+	+	+	+	+	+	+	+	10
Meninges, Inflammation, Focal, Chronic Active							1					1 1.0
<b>RESPIRATORY SYSTEM</b>												

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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
<b>SPECIAL SENSES SYSTEM</b>													
Eye		+	+	+	+	+	+	+	+	+	+	10	
Harderian Gland		+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active						1		1					2 1.0
<b>URINARY SYSTEM</b>													
Kidney		+	+	+	+	+	+	+	+	+	+	10	
Nephropathy			1	1	1			1	2	1	1		7 1.1

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TDMS No. 20516 - 01

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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
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
<b>* TOTALS</b>											
Urinary Bladder		+	+	+	+	+	+	+	+	+	+
<b>10</b>											

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

**ALIMENTARY SYSTEM**

Liver											+											1	
Hepatodiaphragmatic Nodule											2											1	<b>2.0</b>

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

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Larynx	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Inflammation, Chronic Active			1	1		1		1	1	1		<b>6 1.0</b>
Metaplasia, Squamous	2	2	2	2	2	2	2	2	2	2		<b>10 2.0</b>
.....												
Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1		<b>10 1.0</b>
Alveolus, Infiltration Cellular, Histiocyte						1		1				<b>2 1.0</b>
.....												
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2		<b>10 2.0</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		<b>10 2.0</b>
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		<b>10 1.0</b>
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2		<b>10 2.0</b>
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1		<b>10 1.0</b>

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

**SPECIAL SENSES SYSTEM**

NONE

**URINARY SYSTEM**

NONE

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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  
MALE

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
4	4	4	4	4	4	4	4	4	4	4
0	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
	3	3	3	3	3	3	3	3	3	3
<hr/>										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	4	4	4	4	4	4	4	4	4	4
<b>50 mg/m3</b>	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>

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

**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	
.....											
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0	
<b>MALE</b>	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	6	6	6	6	6	6	6	6	6	6	
<b>100 mg/m3</b>	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	<b>* TOTALS</b>

**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/>										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	6	6	6	6	6	6	6	6	6	6
<b>100 mg/m3</b>	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>

**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

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/>										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>	0	0	0	0	0	0	0	0	0	0
<b>100 mg/m3</b>	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
										<b>* TOTALS</b>
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Trachea	+	+	+	+	+	+	+	+	+	<b>10</b>

**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

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



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  
MALE

ANIMAL ID

200 mg/m3

0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
8	8	8	8	8	8	8	8	8	8	8
0	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

Lymph Node, Mediastinal  
Congestion

+  
2

1

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

Page 17

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

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Larynx	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active	2	1	2	2	2	2	2	2	2	2	<b>10 1.9</b>
Metaplasia, Squamous	3	4	4	3	3	4	4	4	4	4	<b>10 3.7</b>
Squamous Epithelium, Hyperplasia	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
.....											
Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Alveolus, Infiltration Cellular, Histiocyte	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
.....											
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Olfactory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Respiratory Epithelium, Inflammation, Suppurative	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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  
MALE

200 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
8	8	8	8	8	8	8	8	8	8	8
0	0	0	0	0	0	0	0	0	0	1
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

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 19

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
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Arteriole, Inflammation, Chronic Active							1		1		<b>2 1.0</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Hepatodiaphragmatic Nodule								1			<b>1 1.0</b>
Inflammation, Chronic Active				1	1			1	1		<b>4 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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+ .. Tissue examined microscopically

x .. Lesion present

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M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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
<b>* TOTALS</b>											

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------------	---	---	---	---	---	---	---	---	---	---	---	-----------

**CARDIOVASCULAR SYSTEM**

Blood Vessel												<b>1</b>
Heart	+	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Cardiomyopathy	1			2	3	2	2	2	1	2		<b>8 1.9</b>

**ENDOCRINE SYSTEM**

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

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
 x .. Lesion present  
 I .. Insufficient tissue  
 M .. Missing tissue  
 A .. Autolysis precludes evaluation  
 BLANK .. Not examined microscopically  
 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked  
 Page 21

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

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Preputial Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active					1						<b>1 1.0</b>
Prostate	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Testes	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**HEMATOPOIETIC SYSTEM**

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

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland		M	M	M	M	M	M	M	M	M	M	0
Skin		+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone		+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>												
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  
Page 23

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

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

Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	<b>10</b> <b>1 1.0</b>

**URINARY SYSTEM**

Kidney Nephropathy	+	+	+	+	+	+	+	+	+	+	<b>10</b> <b>6 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active	1	1	1		1	1	2	2		1	<b>8 1.3</b>
Mesentery								+			<b>1</b>
Fat, Necrosis								1			<b>1 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Atrophy				1						1	<b>2 1.0</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>

\* .. 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
<b>* TOTALS</b>											

Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**CARDIOVASCULAR SYSTEM**

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Cardiomyopathy								1		1	<b>2 1.0</b>

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

NONE

**GENITAL SYSTEM**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Ovary	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Uterus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Bronchial	M	M	M	+	+	M	M	M	M	+	<b>3</b>
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Spleen	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Thymus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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

**INTEGUMENTARY SYSTEM**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Skin	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**MUSCULOSKELETAL SYSTEM**

Bone	+	+	+	+	+	+	+	+	+	+	<b>10</b>
------	---	---	---	---	---	---	---	---	---	---	-----------

**NERVOUS SYSTEM**

Brain	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

**RESPIRATORY SYSTEM**

Larynx	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Inflammation, Chronic Active					1							<b>1 1.0</b>
Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Inflammation, Chronic Active	1	1	2	2	1	1	1	1	1	1		<b>10 1.2</b>
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>	

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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/>											
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0	
<b>FEMALE</b>	0	0	0	0	0	0	0	0	0	0	
ANIMAL ID	1	1	1	1	1	1	1	1	1	1	
<b>0 mg/m3</b>	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	<b>* TOTALS</b>
Inflammation, Chronic Active							1				<b>1 1.0</b>
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<hr/>											
<b>SPECIAL SENSES SYSTEM</b>											
Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active								1			<b>1 1.0</b>
<hr/>											
<b>URINARY SYSTEM</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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	
.....											
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0	
<b>FEMALE</b>	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	
<b>25 mg/m3</b>	1	2	3	4	5	6	7	8	9	0	<b>* TOTALS</b>

**ALIMENTARY SYSTEM**

Liver	+	+	+					+	+		<b>5</b>
Hepatodiaphragmatic Nodule	2	1	1					2	2		<b>5 1.6</b>

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Ovary								+			<b>1</b>
Cyst								1			<b>1 1.0</b>

**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  
 Page 31  
 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**

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**

NONE

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

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

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



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

Suppurative

Trachea	+	+	+	+	+	+	+	+	+	+
										<b>10</b>

**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 33

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
.....										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	5	5	5	5	5	5	5	5	5	5
<b>50 mg/m3</b>	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>

**MUSCULOSKELETAL SYSTEM**

NONE

**NERVOUS SYSTEM**

NONE

**RESPIRATORY SYSTEM**

Larynx	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active	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

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
.....										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	5	5	5	5	5	5	5	5	5	5
<b>50 mg/m3</b>	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>

Suppurative

Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>
---------	---	---	---	---	---	---	---	---	---	---	-----------

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

**ALIMENTARY SYSTEM**

Liver											
Hepatodiaphragmatic Nodule											1
											<b>1 1.0</b>

**CARDIOVASCULAR SYSTEM**

NONE

**ENDOCRINE SYSTEM**

NONE

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Ovary											
Cyst											1
											<b>1 2.0</b>

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

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

**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

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

**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
.....										
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	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
<b>400 mg/m3</b>	1	2	3	4	5	6	7	8	9	0
										<b>* TOTALS</b>

**ALIMENTARY SYSTEM**

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

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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	
FISCHER 344-TACONIC RATS FEMALE		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
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	10
<b>CARDIOVASCULAR SYSTEM</b>												
Heart		+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy							1					1 1.0
<b>ENDOCRINE SYSTEM</b>												
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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 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	
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0	
<b>FEMALE</b>	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	
<b>400 mg/m3</b>	1	2	3	4	5	6	7	8	9	0	<b>* TOTALS</b>

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Ovary	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Cyst	2			1							<b>2 1.5</b>
Uterus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Endometrium, Hyperplasia							1				<b>1 1.0</b>

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Bronchial	+	+	M	M	M	M	M	+	+	+	<b>5</b>
Lymph Node, Mandibular	+	+	+	M	+	+	+	+	+	+	<b>9</b>
Lymph Node, Mediastinal	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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2) Mild 4) Marked

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	
FISCHER 344-TACONIC RATS FEMALE		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
Spleen		+	+	+	+	+	+	+	+	+	+	10
Thymus		+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland		+	+	+	+	+	+	+	+	+	+	10
Skin		+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone		+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>												
Brain		+	+	+	+	+	+	+	+	+	+	10
<b>RESPIRATORY SYSTEM</b>												
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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1) Minimal 3) Moderate  
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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/>											
<b>FISCHER 344-TACONIC RATS</b>	0	0	0	0	0	0	0	0	0	0	
<b>FEMALE</b>	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	
<b>400 mg/m3</b>	1	2	3	4	5	6	7	8	9	0	<b>* TOTALS</b>
<hr/>											
Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active		2	2	2	1	2	2	2	1	1	<b>9 1.7</b>
Alveolus, Infiltration Cellular, Histiocyte	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Arteriole, Mineralization	1										<b>1 1.0</b>
<hr/>											
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Goblet Cell, Hyperplasia	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Olfactory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Olfactory Epithelium, Inflammation, Suppurative	1	1	2	1	1	1	1	1	1	1	<b>10 1.1</b>
Respiratory Epithelium, Accumulation, Hyaline Droplet	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Respiratory Epithelium, Inflammation, Suppurative	1	1	2	1	1	1	1	1	1	1	<b>10 1.1</b>
<hr/>											
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active				1							<b>1 1.0</b>
<hr/>											
<b>SPECIAL SENSES SYSTEM</b>											
<hr/>											
Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
<hr/>											
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active	1									1	<b>2 1.0</b>
<hr/>											
<b>URINARY SYSTEM</b>											
<hr/>											

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 1-4 .. Lesion qualified as:  
 1) Minimal 3) Moderate  
 2) Mild 4) Marked  
 Page 47

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	<b>* TOTALS</b>
Kidney		+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nephropathy			1									<b>1 1.0</b>
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

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Page 48

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked