

TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

C Number: C20011

Lock Date: 06/15/2006

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																										
	6	6	7	7	7	7	7	7	7	7	5	6	7	7	7	5	5	6	7	6	5	7	6	5	7	7	
FISCHER 344 RATS MALE CONTROL	0																										
	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	2	3	4	5	males (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Edema										2																	
Necrosis										2																	
Artery, Inflammation																											
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Artery, Inflammation																											
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Fibrosis																											
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Necrosis																											
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Basophilic Focus																											3
Clear Cell Focus	2									2	2				2	2	2									2	2
Degeneration, Cystic																											3
Hepatodiaphragmatic Nodule																											4

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

DAY ON TEST	ANIMAL ID																									males (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	6	7	7	7	7	7	7	7	7	5	6	7	7	7	5	5	6	7	6	5	7	6	5	7	7	0
3	8	3	3	2	2	2	1	2	9	5	3	2	2	8	8	4	2	6	0	3	5	9	1	3	0	
5	3	0	0	9	9	9	6	9	1	9	0	9	9	2	6	6	9	0	1	0	9	8	1	0	0	
FISCHER 344 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	
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	2
Mixed Cell Focus																										3
Necrosis																										2
Thrombosis																										
Vacuolization Cytoplasmic Serosa, Fibrosis	2	1	2	2	2		1	3		3		2		2	4							4				
Mesentery Necrosis		+	+		+	+		+		+		+							+							
Oral Mucosa Foreign Body Hyperplasia, Squamous Inflammation, Chronic Active																										
Pancreas Basophilic Focus Acinus, Atrophy Artery, Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	
Salivary Glands Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	
Stomach, Forestomach Erosion Hyperplasia, Squamous Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2 4 1 3 3	
Stomach, Glandular Erosion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	

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DAY ON TEST	0 0																								
	6 6 7 7 7 7 7 7 7 5 6 7 7 7 5 5 6 7 6 5 7 6 5 7 7																								
FISCHER 344 RATS MALE CONTROL	3 8 3 3 2 2 2 1 2 9 5 3 2 2 8 8 4 2 6 0 3 5 9 1 3																								
	5 3 0 0 9 9 9 6 9 1 9 0 9 9 2 6 6 9 0 1 0 9 8 1 0																								
ANIMAL ID	0 0																								
	0 0																								
CONTROL	0 0																								
	0 0																								
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5																									

males (cont...)

Ulcer Artery, Inflammation 2

CARDIOVASCULAR SYSTEM

Blood Vessel	+																								
Heart	+ +																								
Cardiomyopathy	1 1 1 1 2 2 2 1 2 2 1 2 2 1																								
Atrium, Thrombosis	3 4 3																								

ENDOCRINE SYSTEM

Adrenal Cortex	+ +																								
Hyperplasia	2 4 1 1 2 1 2 2 2 1 4 1 1																								
Vacuolization Cytoplasmic	1 2 1 1																								
Adrenal Medulla	+ +																								
Hemorrhage	4																								
Hyperplasia	1 1 1 2 1 2 2 2 1 1 1																								
Islets, Pancreatic	+ +																								
Hyperplasia	1 1 1 1 1 1 2 4																								
Parathyroid Gland	+ + + + M M + + + + + + + + + + + + + + + + + + +																								
Hyperplasia	1																								

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

FISCHER 344 RATS MALE

CONTROL

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																									2
Hemorrhage																									3
Pars Distalis, Hyperplasia										1		1													1
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
C-cell, Hyperplasia																									1
		1	2	1						2	1	1													1
																									3

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland	+																								
Hyperplasia																									3
Inflammation, Suppurative																									4
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																									
Inflammation, Chronic Active																									2
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																									2
Inflammation, Suppurative																									4

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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	0	0	0	0	
FISCHER 344 RATS MALE		6	6	7	7	7	7	7	7	5	6	7	7	7	5	5	6	7	6	5	7	6	5	7	7	
CONTROL		3	8	3	3	2	2	2	1	2	9	5	3	2	2	8	8	4	2	6	0	3	5	9	1	3
ANIMAL ID		5	3	0	0	9	9	9	6	9	1	9	0	9	9	2	6	6	9	0	1	0	9	8	1	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Seminal Vesicle Inflammation, Suppurative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	3																								
Testes Germinal Epithelium, Atrophy Interstitial Cell, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
					3						3		3										2	3	

HEMATOPOIETIC SYSTEM

Bone Marrow Thrombosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node						+					+										+				
Lymph Node, Bronchial Angiectasis Hemorrhage	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M
Lymph Node, Mandibular	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal	M	M	+	+	M	+	M	+	M	M	+	M	M	+	M	M	+	+	M	+	M	M	+	+	+
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Accessory Spleen Fibrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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1-Bromopropane

CAS Number: 106-94-5

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Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	6	7	7	7	7	7	7	7	5	6	7	7	7	5	5	6	7	6	5	7	6	5	7	7
	3	8	3	3	2	2	2	1	2	9	5	3	2	2	8	8	4	2	6	0	3	5	9	1	3
	5	3	0	0	9	9	9	6	9	1	9	0	9	9	2	6	6	9	0	1	0	9	8	1	0
FISCHER 344 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
CONTROL	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Hematopoietic Cell Proliferation										1			1							2				1	1
Hemorrhage, Chronic										4												4			
Thymus	+	+	I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	M	M	+	+	+	+	M	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+
Galactocele										3															
Epithelium, Hyperplasia																									
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperkeratosis																									
Inflammation, Chronic Active																									

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle	+																								

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage																									

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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	0	0	0	0	
FISCHER 344 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	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CONTROL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Spinal Cord +

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body								X										X	X					
Inflammation, Chronic Active	1			2		1		2	1					1		1	1	2	2			1	1	
Metaplasia, Squamous																		1	1					
Respiratory Epithelium, Hyperplasia																								
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage													2						2					
Inflammation, Chronic Active					2							2							2					
Alveolar Epithelium, Hyperplasia	1					1	1		2	1	4						1		4					
Alveolus, Infiltration Cellular, Histiocyte	2				2	2					4						1		4					
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body		X		X		X									X			X				X	X	
Inflammation, Chronic Active			1	2	2	2		2	1						2	1	1	2	1	1	1		2	2
Epithelium, Accumulation, Hyaline Droplet	1		1	1	1		1				1	1	1	1	1	1	1	1	1	1	1	1	1	1
Glands, Hyperplasia																		2	2					
Olfactory Epithelium, Metaplasia, Respiratory						2		1						2									1	
Respiratory Epithelium, Hyperplasia			1		2		2				1			2				2	2					
Respiratory Epithelium, Metaplasia, Squamous																								
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																								

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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	0	0	0	0	0
	6	6	7	7	7	7	7	7	7	5	6	7	7	7	5	5	6	7	6	5	7	6	5	7	7
	3	8	3	3	2	2	2	1	2	9	5	3	2	2	8	8	4	2	6	0	3	5	9	1	3
	5	3	0	0	9	9	9	6	9	1	9	0	9	9	2	6	6	9	0	1	0	9	8	1	0
FISCHER 344 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
CONTROL	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

Epithelium, Hyperplasia

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lens, Cataract							3																	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lacrimal Gland																								
Inflammation, Chronic Active																								

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Suppurative																									
Nephropathy, Chronic	1	1	2	3	2	1	1	3	2	1	2	1	2	3	2	3	1	2	1		2	1	1	1	2
Cortex, Infarct			2																						
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																									

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DAY ON TEST	0 0																								* TOTALS	
	7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4		7
	3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2	
	0	9	9	9	4	3	0	9	4	8	8	3	9	9	0	6	9	0	6	0	4	6	0	9	9	
FISCHER 344 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	
CONTROL	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	A	+	47
Edema																										1 2.0
Necrosis																										1 2.0
Artery, Inflammation															2											1 2.0
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Artery, Inflammation															2											1 2.0
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48	
Fibrosis																							3		1 3.0	
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	A	+	47
Necrosis													1													1 1.0
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	A	+	47
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Basophilic Focus				3	3	3						3									3				9 3.0	
Clear Cell Focus				3			2			2					3	2								2	16 2.1	
Degeneration, Cystic														2											2 2.5	
Hepatodiaphragmatic Nodule																		3					4		4 3.8	

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 2) Mild 4) Marked

TDMS No. 20011 - 05

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 07/09/2008

Test Type: CHRONIC

1-Bromopropane

Time Report Requested: 10:20:06

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 106-94-5

First Dose M/F: 07/14/03 / 07/14/03

Species/Strain: RATS/F 344

Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4	7		
	3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2		
	0	9	9	9	4	3	0	9	4	8	8	3	9	9	0	6	9	0	6	0	4	6	0	9	9		
FISCHER 344 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	
CONTROL	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0		* TOTALS
Mixed Cell Focus				2																						2 2.5	
Necrosis												3														2 2.5	
Thrombosis												2														1 2.0	
Vacuolization Cytoplasmic Serosa, Fibrosis	3		2	2		2	2	2	2		3	2	2	2	2	2	2			1		2	1	2	31 2.1		
Mesentery Necrosis				+		+										+	+				+				13	13 3.0	
Oral Mucosa Foreign Body				+																	+		+		3	1	
Hyperplasia, Squamous Inflammation, Chronic Active																						X				1 2.0	
Pancreas Basophilic Focus																										1 1.0	
Acinus, Atrophy Artery, Inflammation	2	3	1	1		2	1	1		1	1		1		1		2	1							23 1.4		
Salivary Glands Hyperplasia																										1 1.0	
Stomach, Forestomach Erosion																										1 1.0	
Hyperplasia, Squamous Ulcer	3												2							2						1 2.0	
Stomach, Glandular Erosion																										7 2.6	
																										50	1 1.0
																										50	1 1.0

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+ .. Tissue examined microscopically
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1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Page 11

TDMS No. 20011 - 05
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
1-Bromopropane
CAS Number: 106-94-5

Date Report Requested: 07/09/2008
Time Report Requested: 10:20:06
First Dose M/F: 07/14/03 / 07/14/03
Lab: BNW

		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	DAY ON TEST	7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4	7
		3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2
		0	9	9	9	4	3	0	9	4	8	8	3	9	9	0	6	9	0	6	0	4	6	0	9	9
FISCHER 344 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
CONTROL	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																									* TOTALS	

Ulcer
Artery, Inflammation 2 1 2.0
1 2.0

CARDIOVASCULAR SYSTEM

Blood Vessel																									+	2	
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy	1		1			2	2	1	1					1	2	2	2	2			2	2			1	1	26 1.5
Atrium, Thrombosis																										3	4 3.3

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																								
Hyperplasia	1	2	1	1			2		1		1	1			2	2	2					2	1	2		4	27 1.8																							
Vacuolization Cytoplasmic																										1	1	1																	2				9 1.2	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																							
Hemorrhage																																																		1 4.0
Hyperplasia		3	1	3		1	2	3					2				3	2	2		1					2	23 1.7																							
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																							
Hyperplasia																										3																						1	2	10 1.7
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	46																							
Hyperplasia																																							2										2	2 1.5

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Page 12

DAY ON TEST	0 0																									* TOTALS	
	7 7 6 7 6 7 7 7 5 6 6 6 6 7 7 6 7 6 6 7 7 5 7 4 7 3 2 6 2 1 0 3 2 3 8 6 5 5 2 3 8 2 6 4 3 2 9 3 2 2 0 9 9 9 4 3 0 9 4 8 8 3 9 9 0 6 9 0 6 0 4 6 0 9 9																										
FISCHER 344 RATS MALE CONTROL	ANIMAL ID																									* TOTALS	
	0 2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																										
Pituitary Gland	+ +																									50	
Cyst																										1 2.0	
Hemorrhage																										4 3.0	
Pars Distalis, Hyperplasia																										8 1.9	
Thyroid Gland	+ +																									50	
C-cell, Hyperplasia	2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 5																									32 1.7	
GENERAL BODY SYSTEM																											
NONE																											
GENITAL SYSTEM																											
Coagulating Gland																										+	3
Hyperplasia																											1 3.0
Inflammation, Suppurative																										2	2 3.0
Epididymis	+ +																									50	
Preputial Gland	+ +																									50	
Hyperplasia																										4	3 3.3
Inflammation, Chronic Active	2 2 1 2 1 2 2 2 2 2 2 2 2 2 1 2 2 2 2 1 2 2 2 2 2																									30 1.5	
Prostate	+ +																									50	
Hyperplasia																										1 1 1 1 1	12 1.3
Inflammation, Suppurative	2 2 1 1 3 2 1 1 1 1 1 1 1 1 2 2 2 1 2 3 1 1 1 1 1																									38 1.6	

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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	0	0	0	0	
FISCHER 344 RATS MALE	7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4	7
CONTROL	3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

Seminal Vesicle Inflammation, Suppurative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																				
																							2					2 2.5																	
Testes Germinal Epithelium, Atrophy Interstitial Cell, Hyperplasia	+	+	+	+	+	+	+	3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																				
																							3				3	2	3									2			2	3			12 2.7
																																													1 2.0

HEMATOPOIETIC SYSTEM

Bone Marrow Thrombosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																					
																							2					1 2.0																		
Lymph Node												+												5																						
Lymph Node, Bronchial Angiectasis Hemorrhage	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	3																				
																							3																				2			1 3.0
																																														1 2.0
Lymph Node, Mandibular	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	3																					
Lymph Node, Mediastinal	+	+	M	+	+	+	+	+	M	+	M	+	M	+	+	M	+	M	+	+	+	+	+	+	M	+	30																			
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																				
Spleen Accessory Spleen Fibrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																					
																																														1
																																														1 2.0

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Page 14

DAY ON TEST	ANIMAL ID																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4	7	
3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2	
0	9	9	9	4	3	0	9	4	8	8	3	9	9	0	6	9	0	6	0	4	6	0	9	9	
FISCHER 344 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	
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	

Hematopoietic Cell Proliferation				1				1	2							1								1	10 1.2	
Hemorrhage, Chronic																		3	3						4 3.5	
Thymus	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	M	I	+	M	M	+	+	+	43

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	M	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	M	M	+	40
Galactocele																									1 3.0
Epithelium, Hyperplasia								1																	1 1.0
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperkeratosis								3										2			3				3 2.7
Inflammation, Chronic Active																					2				1 2.0

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Skeletal Muscle																									1

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hemorrhage																									1 2.0

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

Spinal Cord

1

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body				X																X		X				6
Inflammation, Chronic Active				2				1		1		2		1		2	2			2		1				21 1.4
Metaplasia, Squamous																				1		1				4 1.0
Respiratory Epithelium, Hyperplasia																		1								1 1.0
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																										2 2.0
Inflammation, Chronic Active									2			2														5 2.0
Alveolar Epithelium, Hyperplasia	1				1				1		1				2				2		1					15 1.6
Alveolus, Infiltration Cellular, Histiocyte	1				2			1		2				1					2				1	1		16 1.8
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body				X				X							X		X									11
Inflammation, Chronic Active	2			1	2	2		2	1				1		2	2	1	2		1	2			2		29 1.6
Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		44 1.0
Glands, Hyperplasia												2				2										5 2.0
Olfactory Epithelium, Metaplasia, Respiratory					1				1													2				7 1.4
Respiratory Epithelium, Hyperplasia					2							1			2		2							1		14 1.6
Respiratory Epithelium, Metaplasia, Squamous																						1				1 1.0
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active																							2			1 2.0

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+ .. Tissue examined microscopically

x .. Lesion present

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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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	6	7	6	7	7	7	5	6	6	6	6	7	7	6	7	6	6	7	7	5	7	4	7
	3	2	6	2	1	0	3	2	3	8	6	5	5	2	3	8	2	6	4	3	2	9	3	2	2
	0	9	9	9	4	3	0	9	4	8	8	3	9	9	0	6	9	0	6	0	4	6	0	9	9
FISCHER 344 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
CONTROL	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

Epithelium, Hyperplasia

2

1 2.0

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	49		
Lens, Cataract														3												2 3.0	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lacrimal Gland																											
Inflammation, Chronic Active																							+			1	
																								3			1 3.0

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Suppurative																											1 3.0
Nephropathy, Chronic	2	3		3	1	3	2	2	2			2	3	4	2	3	3	2	1	2			3	2	3	3	44 2.0
Cortex, Infarct																											1 2.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active																											1 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	0	0	0	0	
	6	6	6	7	6	7	7	7	7	7	6	7	7	7	7	5	5	7	7	6	7	6	6	7	
	1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3
	1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0
FISCHER 344 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	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
125 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis						2																		
Basophilic Focus				3	3				3	3			3				3							
Clear Cell Focus						2	2	2	2	2	2		2		2			2	2		2			2
Degeneration, Cystic					2																			
Eosinophilic Focus																								
Hepatodiaphragmatic Nodule									4															
Mixed Cell Focus					2																			
Necrosis																								
Vacuolization Cytoplasmic				1	1	2	2	4	1	2	3	2	2	1	2	2		2	2		2		2	2

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DAY ON TEST	ANIMAL ID																									males (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	6	6	7	6	7	7	7	7	7	7	6	7	7	7	5	5	7	7	6	7	6	6	7	0	0	
1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3		
1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0		

FISCHER 344 RATS MALE

125 PPM

Mesentery Necrosis	+	+	+		+	+								+					+							
	3	3	3		3	3								3	2	2	1	3	2							
Pancreas Acinus, Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
								2	2					3	2	2	1	3	2							
Salivary Glands Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach Hyperplasia, Squamous Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
														2												
Stomach, Glandular Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

CARDIOVASCULAR SYSTEM

Heart Cardiomyopathy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	2	2					1	2	2	2	1	2	1	2	2	2	2	2								

ENDOCRINE SYSTEM

Adrenal Cortex Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
			2	2		2		2			2		1	2	1	2			1	2		2			2	
Vacuolization Cytoplasmic				2			2		1	1				2					2	2					2	

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DAY ON TEST	0																								
	6	6	6	7	6	7	7	7	7	7	6	7	7	7	7	5	5	7	7	6	7	6	6	7	
FISCHER 344 RATS MALE 125 PPM	0																								
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Adrenal Medulla Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		3		2			2					1	2				2		2	3	2		1	2
Islets, Pancreatic Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		1						2											2					2
Parathyroid Gland	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pituitary Gland Cyst Hemorrhage Pars Distalis, Hyperplasia	+	+	+	+	+	+	+	3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
									2											2	2	3		1
Thyroid Gland C-cell, Hyperplasia Follicular Cell, Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		2		2		2	4	1	2	3	2		1	1	1	2	1			1			2	1

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Penis Hyperplasia, Squamous																								

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	6	6	7	6	7	7	7	7	7	6	7	7	7	7	5	5	7	7	6	7	6	6	7	6	0
		1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3	
		1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0	
FISCHER 344 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
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125 PPM		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	males (cont...)

Preputial Gland Inflammation, Suppurative, Chronic Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node Pancreatic, Angiectasis																										
Lymph Node, Bronchial Angiectasis Fibrosis Hemorrhage	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	+	M	
Lymph Node, Mandibular	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

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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	0	0	0	0	
DAY ON TEST		6	6	6	7	6	7	7	7	7	7	6	7	7	7	7	5	5	7	7	6	7	6	6	7	
DAY ON TEST		1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3
DAY ON TEST		1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0
FISCHER 344 RATS MALE 125 PPM	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Lymph Node, Mediastinal Hyperplasia, Lymphoid	+	M	+	M	M	+	+	M	+	M	M	M	+	+	+	+	+	+	M	M	M	+	M	+	+
Lymph Node, Mesenteric Angiectasis Artery, Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Fibrosis Hematopoietic Cell Proliferation Hyperplasia, Lymphoid Infarct, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Thymus	+	+	+	+	+	+	+	M	+	I	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Hyperplasia Epithelium, Hyperplasia	M	+	+	+	+	M	+	+	M	+	+	+	M	+	+	M	+	+	+	+	+	+	+	M	+	+
Skin Cyst Epithelial Inclusion Foreign Body Inflammation, Suppurative, Chronic Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAY ON TEST	6	6	6	7	6	7	7	7	7	7	6	7	7	7	5	5	7	7	6	7	6	7	6	6	7	0	0
	1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3	0	0
	1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0	0	0
.....																											
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125 PPM	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7

males (cont...)

Thrombosis 3

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																											

NERVOUS SYSTEM

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Peripheral Nerve																											
Spinal Cord																											

RESPIRATORY SYSTEM

Larynx Foreign Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active Metaplasia, Squamous	1		1	2	1	1		1		1	1		1	1		1	1		3	1	1	2					
				1								1							1			1					
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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

FISCHER 344 RATS MALE

125 PPM

ANIMAL ID

males (cont...)

Hemorrhage	2									2	2				2										
Metaplasia, Osseous																									
Alveolar Epithelium, Hyperplasia	1	1		3						3	2			2											
Alveolus, Infiltration Cellular, Histocyte	1	2			1				1	2			1				2					1			
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Degeneration, Hyaline														2											
Foreign Body		X					X			X	X			X	X										
Inflammation, Suppurative, Chronic																									
Inflammation, Chronic Active	1	2		1		1	2		1	2	2	1		2	2	1		2	1	1	2	1		1	1
Epithelium, Accumulation, Hyaline Droplet	1		1	2	2	1	1	2		1	2	1	2		2		1	2	2	2	2	1	2	2	1
Glands, Hyperplasia		2		2			2			2	2			2	2					2	2				
Olfactory Epithelium, Metaplasia, Respiratory		1									1			2					1						
Respiratory Epithelium, Hyperplasia		2		1			2			2	3			2	2	1		2	1		2				
Respiratory Epithelium, Metaplasia, Squamous		1																							
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active				1																					

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retina, Degeneration																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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Lab: BNW

DAY ON TEST	0																								
	6	6	6	7	6	7	7	7	7	7	7	6	7	7	7	5	5	7	7	6	7	6	6	7	
	1	6	4	1	1	2	1	2	3	2	2	2	3	2	2	3	6	6	3	2	8	2	0	6	3
1	3	8	1	8	9	9	9	0	9	9	7	0	9	9	0	9	8	0	9	7	9	8	6	0	
FISCHER 344 RATS MALE ANIMAL ID	0																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

Zymbal's Gland

URINARY SYSTEM

Kidney	+																								
Nephropathy, Chronic	1	2	1	4	2	3	2	3	2	2	4	2	3	4	2	3	1		2	3	2	3	1	2	4
Urinary Bladder	+																								

TDMS No. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
 Time Report Requested: 10:20:06
 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	6	7	7	7	7	7	7	7	5	7	5	7	5	5	3	7	7	5	5	6	7	6	7
	6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2
	0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4
FISCHER 344 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
125 PPM	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
	* TOTALS																							

ALIMENTARY SYSTEM

Esophagus	+																							50
Intestine Large, Cecum	+																							47
Intestine Large, Colon	+																							48
Intestine Large, Rectum	+																							48
Intestine Small, Duodenum	+																							48
Intestine Small, Ileum	+																							47
Intestine Small, Jejunum	+																							47
Liver	+																							50
Angiectasis																								2 3.0
Basophilic Focus																								9 3.0
Clear Cell Focus																								25 2.0
Degeneration, Cystic	2																							2 2.0
Eosinophilic Focus	2																							1 2.0
Hepatodiaphragmatic Nodule																								1 4.0
Mixed Cell Focus																								1 2.0
Necrosis																								1 1.0
Vacuolization Cytoplasmic	2 1 1 1 2 1 2 1 1 2 1 3 2 3 2 2 1 2																							38 1.8

* .. 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 26

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	0	0	0	0
	6	6	7	7	7	7	7	7	7	7	5	7	5	7	5	5	3	7	7	5	5	6	7	6	7	
	6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2	2	
	0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4	9	
FISCHER 344 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
125 PPM	0	0	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																										* TOTALS

Mesentery																											13
Necrosis		+			+		+	+				+										+					13 3.0
Pancreas		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Acinus, Atrophy					2			1														1		2	3		13 2.0
Salivary Glands		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic Active																1											1 1.0
Stomach, Forestomach		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia, Squamous											1																1 1.0
Ulcer					2												2										3 2.0
Stomach, Glandular		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ulcer					3												2										2 2.5

CARDIOVASCULAR SYSTEM

Heart		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy			1	2	2	2	2			2	2				2						2						23 1.8

ENDOCRINE SYSTEM

Adrenal Cortex		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia					3	1				3	2			1	1							1				2	21 1.8
Vacuolization Cytoplasmic			1		1						1	2					2		2	1					1		16 1.6

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 2) Mild 4) Marked
 Page 27

TDMS No. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
 Time Report Requested: 10:20:06
 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISCHER 344 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	
125 PPM	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Adrenal Medulla	6	6	7	7	7	7	7	7	7	5	7	5	7	5	5	3	7	7	5	5	6	7	6	7	
Hyperplasia	6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2	50
	0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4	18 1.9
Islets, Pancreatic	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	50
Hyperplasia	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	7 1.9
Parathyroid Gland	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	48
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst																									2 3.5
Hemorrhage																									2 3.5
Pars Distalis, Hyperplasia																									5 2.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Hyperplasia	1		2	3		1	2		2		1	3		2		1		2	2		1		4	31 1.8	
Follicular Cell, Hyperplasia																									1 2.0

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----

Penis
 Hyperplasia, Squamous

																									3
																									1 1.0

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 2) Mild 4) Marked
 Page 28

DAY ON TEST	0																								* TOTALS
	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2	2
	0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4	9
FISCHER 344 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
125 PPM	0	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

Lymph Node, Mediastinal Hyperplasia, Lymphoid	M	+	M	M	M	+	+	M	+	M	+	+	+	+	+	M	+	M	M	M	+	M	M	M	M	25	1	3.0
Lymph Node, Mesenteric Angiectasis Artery, Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1	3.0
Spleen Fibrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	2	3.0
Hematopoietic Cell Proliferation			2	1	2	2	2	2	2					2	1									2	2	17	1.8	
Hyperplasia, Lymphoid				2																						1	2.0	
Infarct, Chronic										3																1	3.0	
Thymus	+	M	+	+	+	+	+	+	I	+	+	+	M	+	+	+	+	+	+	+	M	+	M	+	+	41		

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele	+	+	+	+	+	+	+	+	M	M	+	+	M	M	+	+	M	+	+	M	M	M	+	+	+	36	1	4.0
Hyperplasia																										1	4.0	
Epithelium, Hyperplasia					2																					1	2.0	
Skin Cyst Epithelial Inclusion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1	4.0
Foreign Body							4																			1		
Inflammation, Suppurative, Chronic																4										1	4.0	
Inflammation, Chronic Active			3																							3	3.3	

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

DAY ON TEST	0																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	7	7	7	7	7	7	7	7	5	7	5	7	5	5	3	7	7	5	5	6	7	6	7
	6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2	2
	0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4	9
FISCHER 344 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
125 PPM	0	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	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

Thrombosis

1 3.0

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Skeletal Muscle																											1

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage																												1 2.0
Peripheral Nerve																												1
Spinal Cord																												1

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Foreign Body																												1
Inflammation, Chronic Active																												28 1.3
Metaplasia, Squamous																												6 1.0
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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

+ .. Tissue examined microscopically

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M .. Missing tissue

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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	0	0	0	0	0	0	0	0	0	0	0	0							
DAY ON TEST		6	6	7	7	7	7	7	7	7	7	5	7	5	7	5	5	3	7	7	5	5	6	7	6	7				
		6	1	2	2	2	3	3	3	3	3	6	2	2	2	0	8	1	2	2	6	4	9	0	2	2				
		0	1	9	9	9	0	0	0	0	0	2	9	8	9	5	5	6	9	9	0	0	9	8	4	9				
																													
FISCHER 344 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				
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
125 PPM		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5				
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0				
		* TOTALS																												
Zymbal's Gland																									+				1	
URINARY SYSTEM		 																												
Kidney		 																												
Nephropathy, Chronic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
		1	2	3	3	3	2	3	3	3	3		2	2	3		3		4	4	3		2	2	3	3	50			
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50			

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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	0	0	0	0	
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
	males (cont...)																								

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum Inflammation, Chronic Active	+	A	+	A	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	A	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum Necrosis	+	+	+	A	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	A	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum Inflammation, Chronic Active Necrosis	+	A	+	A	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	A	+	A	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																								
Basophilic Focus													3	3									3	
Clear Cell Focus				2			3					2	2							2	3		2	2
Degeneration, Cystic						2																		
Eosinophilic Focus																								
Mixed Cell Focus												2									2			

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

TDMS No. 20011 - 05

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 07/09/2008

Test Type: CHRONIC

1-Bromopropane

Time Report Requested: 10:20:06

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 106-94-5

First Dose M/F: 07/14/03 / 07/14/03

Species/Strain: RATS/F 344

Lab: BNW

DAY ON TEST	ANIMAL ID																									males (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	0	
8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	0	
2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	0	
FISCHER 344 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	
250 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Necrosis																										
Thrombosis																										
Vacuolization Cytoplasmic	3	2	2		1		3	2	2	1	2	2	3	2	2	1		2		2		1	2			
Mesentery																										
Necrosis						+												+		+		+				
						3												3		3		3				
Oral Mucosa																										
Foreign Body																										
Hyperplasia, Squamous																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Acinus, Atrophy						1		3					3	1	1			2			2		1	3	2	
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Inflammation, Chronic Active							2																			
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hyperplasia, Squamous																										
Ulcer	2						2																			
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Erosion																2										
Ulcer																										
Tongue																										
Hyperplasia, Squamous							+																			
							1																			

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

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2) Mild 4) Marked

Page 35

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	7	7	7
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	2	2	2
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	9	9	9
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2

males (cont...)

CARDIOVASCULAR SYSTEM

Blood Vessel																													
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy				2		2	1			1	1		2	2	1		2		1		1	2			2				

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Hyperplasia	2			3						2						1	3							2	1	1				1	
Vacuolization Cytoplasmic									1						2																
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			
Hyperplasia	2			1		2	2	1					2	2					2								1		2	1	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hyperplasia																															
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
																											M	+	+	+	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Cyst																															
Hemorrhage						2																									
Pars Distalis, Hyperplasia						2					1																				
																1										1		1		2	

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

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	
FISCHER 344 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	
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C-cell, Hyperplasia	2					2	1	2					1	1	2					2			3	1	2

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland																									
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Penis																									
Concretion																									
Preputial Gland	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Ectasia																									
Inflammation, Chronic Active	2	1	1	2		2					2		2	2	3			2		2			2	1	2	
Prostate																									
Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Suppurative	1	1	2	2		2	1	1		1	1		2	2	1		1	2		2	1		2	1		
Seminal Vesicle																									
Congestion	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

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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	0	0	0	0	0	
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	
FISCHER 344 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	
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Mineralization
 Germinal Epithelium, Atrophy
 Interstitial Cell, Hyperplasia

3

2

2

1

2

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lymph Node Deep Cervical, Angiectasis																										+	3
Lymph Node, Bronchial Angiectasis Hemorrhage	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
					3																						
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal Angiectasis Hyperplasia, Lymphoid	+	+	+	M	+	M	M	M	+	M	M	+	M	+	M	+	M	+	+	+	M	+	M	+	M	+	M
						2																					
Lymph Node, Mesenteric Angiectasis Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
						3																					
Spleen Accessory Spleen Fibrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	
FISCHER 344 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	
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Hematopoietic Cell Proliferation 2 1 2 2 3 2 1

Hemorrhage, Chronic 4

Infarct, Chronic 3 3

Infiltration Cellular, Mononuclear Cell 3

Thymus Cyst + + + + + M + + + + M + + + + + + + + + + + + +

INTEGUMENTARY SYSTEM

Mammary Gland + M + M + M M + + + + + M M M + + + + + M + + +

Skin +

Cyst Epithelial Inclusion 3

Hyperkeratosis 4

Inflammation, Suppurative, Chronic 4

Inflammation, Chronic Active

MUSCULOSKELETAL SYSTEM

Bone +

Skeletal Muscle

NERVOUS SYSTEM

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7
		8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2
		2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9
FISCHER 344 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
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
																										males (cont...)

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Peripheral Nerve																										
Spinal Cord																										

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body									X												X				
Inflammation, Chronic Active	1			2	1	1	1	2	1	2	1		2	1					2	1	1				1
Metaplasia, Squamous										2										1					
Respiratory Epithelium, Hyperplasia														1											
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body Hemorrhage												X													
Inflammation, Suppurative, Chronic																									
Alveolar Epithelium, Hyperplasia	1																								
Alveolar Epithelium, Metaplasia, Squamous																									
Alveolus, Infiltration Cellular, Histiocyte	2																								
Nose	+	A	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+
Foreign Body			X	X									X	X					X	X	X		X	X	X
Inflammation, Suppurative, Chronic																									
Inflammation, Chronic Active	1		2	2	1	1	2	2																	

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 Page 40
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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	0	0	0	0	0
	6	6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7
	8	0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2
	2	8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9
FISCHER 344 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
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

males (cont...)

Epithelium, Accumulation, Hyaline Droplet Glands, Hyperplasia	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Olfactory Epithelium, Atrophy																									
Olfactory Epithelium, Metaplasia, Respiratory	2	1				1					3	2						1				2	2	2	
Respiratory Epithelium, Hyperplasia	2	1				1	2	1		1	2	2	2				2	2	1			2	2	2	
Trachea Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lens, Cataract																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Zymbal's Gland						+																			

URINARY SYSTEM

Kidney Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Nephropathy, Chronic	3	1	1	2		3	1	2			4		3	2	2		1	3	1	1	1		3	3	3
Cortex, Renal Tubule, Casts Granular																									

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 Page 41

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6		6	5	6	4	7	6	6	5	5	7	4	7	7	7	5	6	7	6	6	5	5	7	7	7	
8		0	1	9	8	3	0	6	3	9	3	1	2	0	2	6	0	3	1	8	5	3	2	2	2	
2		8	4	8	8	0	3	6	4	0	0	8	9	9	9	1	6	0	2	8	4	4	9	9	9	
FISCHER 344 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	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Urinary Bladder Hemorrhage		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

males
(cont...)

* .. 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. 20011 - 05

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 07/09/2008

Test Type: CHRONIC

1-Bromopropane

Time Report Requested: 10:20:06

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 106-94-5

First Dose M/F: 07/14/03 / 07/14/03

Species/Strain: RATS/F 344

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	7	6	6	5		
		2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7
		9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8
FISCHER 344 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
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																									

ALIMENTARY SYSTEM

Esophagus	+ +	50	
Intestine Large, Cecum Inflammation, Chronic Active	+ +	47	1 2.0
Intestine Large, Colon	+ +	48	
Intestine Large, Rectum Necrosis	+ +	48	1 1.0
Intestine Small, Duodenum	+ +	48	
Intestine Small, Ileum Inflammation, Chronic Active Necrosis	+ +	46	1 2.0 1 1.0
Intestine Small, Jejunum	+ +	46	
Liver	+ +	50	
Angiectasis		2	1 2.0
Basophilic Focus		3	8 3.0
Clear Cell Focus	2	2 2	17 2.2
Degeneration, Cystic			1 2.0
Eosinophilic Focus		2	1 2.0
Mixed Cell Focus		2	3 2.0

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 2) Mild 4) Marked

	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAY ON TEST	7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	6	5
	2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9
	9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
																							* TOTALS

Necrosis																							
Thrombosis																							
Vacuolization Cytoplasmic	1	2	2		2	2	2		1	1	2									2	2	2	
Mesentery				+	+				+														
Necrosis					3				3														
Oral Mucosa																							
Foreign Body																							
Hyperplasia, Squamous	2																						
Pancreas																							
Acinus, Atrophy	2		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Salivary Glands																							
Inflammation, Chronic Active																							
Stomach, Forestomach																							
Hyperplasia, Squamous																							
Ulcer		2												2		3							
Stomach, Glandular																							
Erosion																							
Ulcer																							
Tongue																							
Hyperplasia, Squamous																							

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAY ON TEST	7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	6	7	6	6	5	7	8
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0			
																												* TOTALS

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+																										9
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy		1	2			2				2	2	1				2	2							2			2	23 1.7

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia	1		1	3		2		1					3			2	2					1		1	2	2	2	22 1.8	
Vacuolization Cytoplasmic				2	2							2	3			1	2							3				9 2.0	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia	2		1		2				1	4	1	2		2			1	2				3				2		23 1.8	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia	1																							1	2			6 1.3	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	47	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst										3																		1 3.0	
Hemorrhage						3																				4	2	3	5 2.8
Pars Distalis, Hyperplasia	1											2			2					1				2				11 1.5	

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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	0	0	0	0	
	7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	7	6	6	5
FISCHER 344 RATS MALE 250 PPM ANIMAL ID	2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7
	9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
C-cell, Hyperplasia	1	2	2	2	2	2	1	1				1	1	2	2	2	2			2	2	2	2			29 1.7

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Coagulating Gland																										1
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Penis																										1
Concretion																										1 2.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Ectasia																									1 2.0	
Inflammation, Chronic Active	3	1	2	2			2	1	1	3		2	2	2	2		1		2	2		2	1		31 1.8	
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia										1							1			2					10 1.6	
Inflammation, Suppurative	1	2	2	2	1	1	1	1	2	1	2		2	2	2	2	2	1	1	2	2	2		1	40 1.5	
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Congestion			3																						1 3.0	
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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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	0	0	0	0	
		7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	7	6	7	6	5	
		2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7
		9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8
FISCHER 344 RATS MALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

* TOTALS

Mineralization																										1	1.0	
Germinal Epithelium, Atrophy						3			2											3							7	2.6
Interstitial Cell, Hyperplasia										1																	2	1.5

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node Deep Cervical, Angiectasis																										5	1 3.0
Lymph Node, Bronchial Angiectasis Hemorrhage	M	M	M	M	M	+	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	+	+	5	2 3.5 1 3.0	
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mediastinal Angiectasis Hyperplasia, Lymphoid	M	M	M	M	M	M	+	M	+	M	M	I	M	+	+	+	+	M	+	+	M	+	M	+	23	1 3.0 1 2.0	
Lymph Node, Mesenteric Angiectasis Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1 3.0 1 3.0	
Spleen Accessory Spleen Fibrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	1 1 2.0	

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Page 47

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	6	6	5		
	2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7	
	9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8	
FISCHER 344 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	
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																								* TOTALS		

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																								3	2.0	
Peripheral Nerve																								+	+	2
Spinal Cord																								+	+	2

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																								
Foreign Body																								X	X	X	5																							
Inflammation, Chronic Active	1	2	1		1		2	1	2		2	2	1		1	1	1								1	31	1.4																							
Metaplasia, Squamous																								1	1	1	1	8	1.1																					
Respiratory Epithelium, Hyperplasia																																																	1	1.0
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																								
Foreign Body																																																	1	
Hemorrhage																																																	2	2.0
Inflammation, Suppurative, Chronic																																																	1	4.0
Alveolar Epithelium, Hyperplasia																										2		2		3	2										2	1	2					2	13	1.8
Alveolar Epithelium, Metaplasia, Squamous																								1																									1	1.0
Alveolus, Infiltration Cellular, Histiocyte																											1			1		1	1			1			1						2	1	3	13	1.5	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48																								
Foreign Body																																			X	X								X	X	X		15		
Inflammation, Suppurative, Chronic																																																	2	4.0
Inflammation, Chronic Active	1		1	2	1	1	1		2	1		2	1	2	1	1	1	1	1	1	1	1	1	1	1	34	1.5																							

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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	0	0	0	0	
	7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	6	6	5	
	2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7
	9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8
FISCHER 344 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
250 PPM	0	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	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

* TOTALS

Epithelium, Accumulation, Hyaline Droplet Glands, Hyperplasia	1	1	1	2	1	2	1		2	2		1	1	1	2	1	2	1	1	1	1	1	1	1	36
Olfactory Epithelium, Atrophy				2	2	2			2	2															14
Olfactory Epithelium, Metaplasia, Respiratory																					1				1
Respiratory Epithelium, Hyperplasia									2			1		2								2		1	20
Trachea Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																									1

SPECIAL SENSES SYSTEM

Eye Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Lens, Cataract										1															1
											3														3
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Zymbal's Gland							+																		2

URINARY SYSTEM

Kidney Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Nephropathy, Chronic										3															1
Cortex, Renal Tubule, Casts Granular	3	2	3	4	3	3	1		2	3	1		4	2	1		2	4	2	3	2	2	1	39	
																					1			1	2

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		7	6	7	7	7	7	5	6	6	7	5	6	5	6	7	6	7	6	7	6	7	6	6	5		
		2	3	2	2	2	3	3	1	1	2	2	6	7	9	2	9	2	9	2	1	3	2	9	5	7	
		9	3	5	9	9	0	6	4	8	9	0	8	5	7	9	9	9	0	9	8	0	9	0	8	8	
.....																											
FISCHER 344 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	
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																										* TOTALS	
Urinary Bladder Hemorrhage		+																								50	
																										1 3.0	

* .. 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	0	0	0	0	
		5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5
		0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6
		0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2
FISCHER 344 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4

males (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Basophilic Focus											3	3		3		3		3							
Clear Cell Focus											2	2	2	2	X			2							2
Degeneration, Cystic													2				2		2						
Eosinophilic Focus																									
Hemorrhage																									
Hepatodiaphragmatic Nodule																								4	
Necrosis															3										
Vacuolization Cytoplasmic	2	2		2	2	4	2		2	2	3	2	2	3	2	2	2	3	2	3	3		2	2	2

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DAY ON TEST	0 0																								
	5 6 4 3 5 6 5 4 6 6 7 7 7 6 7 7 5 5 7 6 6 7 5 4 5																								
FISCHER 344 RATS MALE 500 PPM	0 0																								
	0 0																								
ANIMAL ID	6 6																								
	0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2																								
	1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5																								
	males (cont...)																								
Mesentery Necrosis	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Oral Mucosa Foreign Body Inflammation, Chronic Active	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Pancreas Basophilic Focus Cyst Fibrosis Necrosis Acinus, Atrophy Artery, Inflammation	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Salivary Glands Inflammation, Chronic Active	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Stomach, Forestomach Hyperplasia, Squamous Ulcer	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Stomach, Glandular Epithelium, Hyperplasia	+ + + + +					+ + + + +					+ + + + +					+ + + + +									
Tongue Hyperplasia, Squamous	+ + + + +					+ + + + +					+ + + + +					+ + + + +									

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST	5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5
	0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6
	0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
																									males (cont...)

CARDIOVASCULAR SYSTEM

Blood Vessel		+		+																						
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy		2					2			2	2				2				2			2	1			
Atrium, Thrombosis													3													
Ventricle, Thrombosis													3													

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia										1	2		1		2		2			1	1	1	2		
Vacuolization Cytoplasmic		1				3						4			2				1		1			1	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia			1			2						2		2							2			1	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia		1					2				1		2								4				
Parathyroid Gland	+	+	M	+	+	+	M	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia						2																		2	

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 Page 54

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5	
	0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6	
	0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2	
FISCHER 344 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	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
	males (cont...)																									

Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Dilatation												3													
Hyperplasia												2													
Inflammation, Suppurative														4											
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Germinal Epithelium, Atrophy																									
Interstitial Cell, Hyperplasia							1																		

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lymph Node																									
Pancreatic, Hemorrhage																									
Lymph Node, Bronchial	M	M	+	+	M	M	M	M	M	M	M	M	M	+	M	M	M	M	+	M	M	+	M	M	M
Hemorrhage														2											
Hyperplasia, Lymphoid				2																	3			2	
Lymph Node, Mandibular	M	M	M	+	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	+	M
Angiectasis																									3
Lymph Node, Mediastinal	+	+	M	+	M	M	+	+	+	M	+	M	+	M	+	+	+	+	M	+	+	+	+	M	+
Angiectasis																									3
Hyperplasia, Lymphoid				2																					
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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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	0	0	0	0	0
	5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5
	0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6
	0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2
FISCHER 344 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
500 PPM	0	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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	

males (cont...)

Angiectasis																												
Hyperplasia, Lymphoid																												
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation																												
Hemorrhage, Chronic																												
Infarct, Chronic																												
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	M	M	M	+	+	+	+	M	+	+	+	M	+	+	M	+	+	M	+	+	+	+	+	+	+	+	
Epithelium, Hyperplasia																													
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous																													
Inflammation, Suppurative, Chronic																													
Inflammation, Chronic Active																													

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fibrosis																													
Hyperostosis																													
Inflammation, Suppurative, Chronic																													

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FISCHER 344 RATS MALE		5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5
500 PPM		0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6
ANIMAL ID		0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males (cont...)

Skeletal Muscle + + +

Inflammation, Suppurative, Chronic 4

NERVOUS SYSTEM

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
									2																
Peripheral Nerve						+																			
Spinal Cord						+																			

RESPIRATORY SYSTEM

Larynx Foreign Body Inflammation, Suppurative, Chronic Inflammation, Chronic Active Metaplasia, Squamous Respiratory Epithelium, Hyperplasia	+	+	+	+	+	+	X	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	1		1		1	2	2			2	1	1		1	1				1	2	1			4	
										1															2
																									2
Lung Hemorrhage Inflammation, Suppurative, Chronic Inflammation, Chronic Active Alveolar Epithelium, Hyperplasia Alveolus, Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			4				4																		4
	1																								
	1			1								1							1				2		1

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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	0	0	0	0	0	0
	5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5	
	0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6	
	0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2	
FISCHER 344 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	
500 PPM	0	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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	

males (cont...)

Artery, Inflammation

Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body		X										X	X												
Inflammation, Suppurative, Chronic												4	4											4	
Inflammation, Chronic Active	1	2	1	1	1	1		2	1	2				2	2	1	1		1	1	1	2	1	2	2
Epithelium, Accumulation, Hyaline Droplet Glands, Hyperplasia	2		2	1	2	2	1	1	1	2	2		1	2	1	1		1	1		1	2	1	1	1
Olfactory Epithelium, Metaplasia, Respiratory		1									2	2										2	3	1	
Respiratory Epithelium, Hyperplasia		2									3	2		1		1						2	3		
Respiratory Epithelium, Metaplasia, Squamous											2	1													

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active	1			1																					3
Epithelium, Hyperplasia																									2

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active			2																						
Lens, Cataract								3				3													
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Suppurative, Chronic								4																	
Zymbal's Gland	+								+																

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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	0	0	0	0	
		5	6	4	3	5	6	5	4	6	6	7	7	7	6	7	7	5	5	7	6	6	7	5	4	5
		0	8	2	9	7	5	2	5	6	9	2	0	3	5	3	2	6	7	2	2	6	0	8	8	6
		0	8	2	4	5	3	7	3	6	7	9	1	0	9	0	9	2	7	9	4	0	2	1	4	2
FISCHER 344 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
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	
Cyst																										
Nephropathy, Chronic	2	3	1		2	4				3	2	4	2	3		3	3	1	1	2	2	2	2	2	1	1
Pelvis, Inflammation, Chronic Active												2				2										
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																										
Transitional Epithelium, Hyperplasia																										

* .. 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	0	0	0	0	0
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7	6	6	6
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6	6	6
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3	3	3
FISCHER 344 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
500 PPM	0	0	0	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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	5	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	0	0
* TOTALS																											

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Intestine Large, Colon	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Intestine Large, Rectum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Necrosis																							1					1 1.0
Intestine Small, Duodenum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Intestine Small, Ileum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Intestine Small, Jejunum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	48
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Basophilic Focus					3				3											3								8 3.0
Clear Cell Focus			2		2			2							2			2		2		2						15 2.0
Degeneration, Cystic									3																			4 2.3
Eosinophilic Focus									3																			1 3.0
Hemorrhage																									3			1 3.0
Hepatodiaphragmatic Nodule																3												2 3.5
Necrosis																												1 3.0
Vacuolization Cytoplasmic			3		2			2	3		2		3	2	2	2	2		2	2	2	3		3			37 2.3	

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BLANK .. Not examined microscopically
Page 61
1-4 .. Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked

DAY ON TEST	0 0																								* TOTALS	
	6 6 7 7 7 6 6 7 7 6 6 6 4 6 7 6 7 7 5 7 7 4 6 7 6 1 3 2 2 2 8 7 0 3 6 6 3 4 4 2 3 2 1 7 2 2 4 8 2 6 1 9 5 9 9 2 0 9 0 0 0 5 9 2 9 5 9 0 7 9 9 6 7 9 3																									
FISCHER 344 RATS MALE	0 0																									
500 PPM	0 0																									
ANIMAL ID	6 2 2 2 2 3 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																									
Mesentery	+ +																								19	
Necrosis	3 3 3 3 3																								3	17 3.0
Oral Mucosa	+ +																								4	
Foreign Body																									2	2 2.0
Inflammation, Chronic Active																										
Pancreas	+ +																								50	
Basophilic Focus																									1	1 1.0
Cyst	3																								1	3 3.0
Fibrosis																									1	4 4.0
Necrosis	2																								1	2 2.0
Acinus, Atrophy	2 2 2 2 1 2 3 2 2																								23	1.9
Artery, Inflammation	3																								3	1 3.0
Salivary Glands	+ +																								50	
Inflammation, Chronic Active	2																								2	2 2.0
Stomach, Forestomach	+ +																								50	
Hyperplasia, Squamous																									1	2 2.0
Ulcer	2																								2	4 2.0
Stomach, Glandular	+ +																								50	
Epithelium, Hyperplasia	2																								1	2 2.0
Tongue	+ +																								1	
Hyperplasia, Squamous	3																								3	1 3.0

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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	0	0	0	0		
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7	6	
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6	
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3	
FISCHER 344 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	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	4	5	6	7	8	9	0
	* TOTALS																									

CARDIOVASCULAR SYSTEM

Blood Vessel	+																								4
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy			2	2	1	1									2			1	2						15 1.7
Atrium, Thrombosis										3															2 3.0
Ventricle, Thrombosis																									1 3.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia			1	4		2		2			1				1		1	2		1	2		2		20 1.6
Vacuolization Cytoplasmic								1	2					1	1						2				12 1.7
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia		1	2	3		2	2				1		1	2			2	1		1	1	1			19 1.6
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia			1												2	2			1						9 1.8
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	46
Pituitary Gland	+	+	+	+	+	+	+	+	+		M	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Pars Distalis, Hyperplasia					1	2	1							2							2				7 1.7

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 Page 63

DAY ON TEST	0																								* TOTALS	
	6																									
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	5	7	7	4	6	7	6		
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6	
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3	
.....																										
FISCHER 344 RATS MALE 500 PPM	0																								* TOTALS	
	0																									
ANIMAL ID	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Ultimobranchial Cyst																										1 2.0
C-cell, Hyperplasia	1		2	2	1	1		2		3	1	1	2		1	1	2		1		1	1	1	1	2	34 1.5

GENERAL BODY SYSTEM

Peritoneum																											2
Inflammation, Suppurative, Chronic																											1 4.0

GENITAL SYSTEM

Coagulating Gland																											2
Epididymis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Penis																											1
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ectasia																											1 3.0
Hyperplasia																											1 2.0
Inflammation, Chronic Active		1	2	2		2	1	2	2	2		2		2	1	2		3	1	1		2	1	1		37 1.8	
Prostate	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia	1		1	2	3		2																				17 1.4
Inflammation, Suppurative, Chronic																											1 4.0
Inflammation, Suppurative			2	1	2		1	1	2	1				1	2	1		1	1		1	2	1	2	1		36 1.4

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DAY ON TEST	0																								* TOTALS			
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7		6		
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6			
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3			
FISCHER 344 RATS MALE 500 PPM ANIMAL ID	0																								* TOTALS			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		6	6	
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4		4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9		0		

Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Dilatation																											1 3.0
Hyperplasia																											1 2.0
Inflammation, Suppurative						4																					2 4.0
Testes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Germinal Epithelium, Atrophy		2		3	3					3					3												6 2.8
Interstitial Cell, Hyperplasia																											1 1.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Lymph Node																											
Pancreatic, Hemorrhage					+							+	+		+											4	1 2.0
Lymph Node, Bronchial	+	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	8	
Hemorrhage																											1 2.0
Hyperplasia, Lymphoid																											4 2.5
Lymph Node, Mandibular	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	6	
Angiectasis																											1 3.0
Lymph Node, Mediastinal	M	+	+	M	+	+	+	M	M	+	+	+	+	+	+	+	M	+	+	M	M	+	M	M	M	32	
Angiectasis																											3 3.0
Hyperplasia, Lymphoid																											2 2.5
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

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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	0	0	0	0	0	0
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7	6	
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6	
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3	
FISCHER 344 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	
500 PPM	0	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	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
* TOTALS																										

Angiectasis	2																								2	2.5			
Hyperplasia, Lymphoid																									1	2.0			
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	6	2.2		
Hematopoietic Cell Proliferation																									3	2			
Hemorrhage, Chronic	4																								3	3.7			
Infarct, Chronic	3																								3	3.3			
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	M	+	+	M	+	46		

INTEGUMENTARY SYSTEM

Mammary Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	M	+	+	M	M	+	+	M	36	1	1.0
Epithelium, Hyperplasia																									1				
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1	1.0	
Hyperplasia, Squamous																									1				
Inflammation, Suppurative, Chronic	4																								4	4			
Inflammation, Chronic Active																									3	3			

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1	4.0
Fibrosis																											
Hyperostosis																									1	1.0	
Inflammation, Suppurative, Chronic																										4.0	

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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	0	0	0	0	0
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7	6
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS	

Skeletal Muscle Inflammation, Suppurative, Chronic 3 **1 4.0**

NERVOUS SYSTEM

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	2 2.0
Peripheral Nerve																								1				
Spinal Cord																								1				

RESPIRATORY SYSTEM

Larynx Foreign Body Inflammation, Suppurative, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1											
Inflammation, Chronic Active	1						2	1	1						2	1				1	1	2	1	1	1	2	26	1.3										
Metaplasia, Squamous											1																										5	1.2
Respiratory Epithelium, Hyperplasia																								1	2.0													
Lung Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	2	1 2.0										
Inflammation, Suppurative, Chronic																								3	4.0													
Inflammation, Chronic Active											3	1													3	1.7												
Alveolar Epithelium, Hyperplasia	1					1											1					2	1	1	1	1	1	1	1	1	1	11	1.1					
Alveolus, Infiltration Cellular, Histiocyte	1				1	4				2						2			1	1	1	1	1	1	1	1	1	1	1	11	1.8							

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

FISCHER 344 RATS MALE 500 PPM ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	4	5	6	7	8	9	0

																									* TOTALS	
Artery, Inflammation																									2	1 2.0
Nose																										50
Foreign Body																									X	11
Inflammation, Suppurative, Chronic																									4	7 4.0
Inflammation, Chronic Active																										35 1.5
Epithelium, Accumulation, Hyaline Droplet																										44 1.3
Glands, Hyperplasia																										15 2.0
Olfactory Epithelium, Metaplasia, Respiratory																										12 1.8
Respiratory Epithelium, Hyperplasia																										17 1.9
Respiratory Epithelium, Metaplasia, Squamous																										2 1.5

Trachea																										50
Inflammation, Chronic Active																									1	4 1.5
Epithelium, Hyperplasia																										1 2.0

SPECIAL SENSES SYSTEM

Eye																										50
Inflammation, Chronic Active																									1	2 1.5
Lens, Cataract																										2 3.0
Harderian Gland																										50
Inflammation, Suppurative, Chronic																									4	2 4.0
Zymbal's Gland																										2

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+ .. 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	0	0	
	6	6	7	7	7	6	6	7	7	6	6	6	4	6	7	6	7	7	5	7	7	4	6	7	6
	1	3	2	2	2	8	7	0	3	6	6	3	4	4	2	3	2	1	7	2	2	4	8	2	6
	1	9	5	9	9	2	0	9	0	0	0	5	9	2	9	5	9	0	7	9	9	6	7	9	3
FISCHER 344 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
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49	
Cyst																									1 3.0	
Nephropathy, Chronic	2	2	4	2	3	1	3	3	3		2	3		3	3	1	3	2	2	3	2	1	3	3	1	44 2.3
Pelvis, Inflammation, Chronic Active																										2 2.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active																										1 2.0
Transitional Epithelium, Hyperplasia																										1 4.0

*** END OF MALE DATA ***

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

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I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

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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	0	0	0	0	
	7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	
	3	3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	
	2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	1
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	A	+	+	+	A	+	A	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	A	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis					3																		2	
Basophilic Focus	3		3	3			3		3	3	3	3	3	3		3	3	3	3		3	3	3	
Clear Cell Focus			2	1	2		2				2		3	2	2	3		2	2		2	3	2	
Cyst																				2				
Eosinophilic Focus																								
Hepatodiaphragmatic Nodule														4						4				
Mixed Cell Focus													3						3					
Necrosis																								
Vacuolization Cytoplasmic	2	1	2	1	1	2	2		1	1	1		2	2	2	4		2	2	3	1	2	3	2
Serosa, Fibrosis																							2	

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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAY ON TEST		7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7
		3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	3	
		2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	1
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Mesentery Necrosis																									
Oral Mucosa Hyperplasia, Squamous																									
Pancreas Acinus, Atrophy																									
Salivary Glands																									
Stomach, Forestomach Hyperplasia, Basal Cell Hyperplasia, Squamous Ulcer																									
Stomach, Glandular Ulcer																									

CARDIOVASCULAR SYSTEM

Heart Cardiomyopathy Atrium, Thrombosis																									

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+ .. Tissue examined microscopically
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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	0	0	0	0	
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL		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		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
		7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	
		3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	3	
		2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Degeneration, Cystic																										
Hyperplasia		1		2		1						2		1	2		3	2			2	2	1	2		
Vacuolization Cytoplasmic				1								2		2		3									1	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia											2												3			
Metaplasia, Osseous																										
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																	2		4							
Hemorrhage												3														
Pars Distalis, Hyperplasia																	2									
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ultimobranchial Cyst																							2			
C-cell, Hyperplasia		2	4	2	2		1	2				1	2	4	2		3		2	1	2	2	2	4	2	2

GENERAL BODY SYSTEM

NONE

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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 M .. Missing tissue
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 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST	7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7		
	3	3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	3		
	2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	1		
.....																											
FISCHER 344 RATS FEMALE	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5		

females (cont...)

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia				4																					
Inflammation, Chronic Active	2	1	2	1		1				2			2	1			1			1				2	2
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst												2													4
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Vagina																									
Muscularis, Hypertrophy												3													3

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Histiocytic																									
Lymph Node																									
Inflammation, Chronic Active																									
Lymph Node, Bronchial	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Angiectasis																									
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

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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	0	0	0	0	0	0	0
	7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7
	3	3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	3	3	
	2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	1		
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7
																											8
																											9

females (cont...)

Lymph Node, Mediastinal	M	+	+	M	M	+	+	+	+	+	+	M	M	+	M	+	M	+	+	+	M	+	+	M	M	
Lymph Node, Mesenteric Hyperplasia, Lymphoid Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Hematopoietic Cell Proliferation Hemorrhage, Chronic Infarct, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Thymus Cyst	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skin Hyperkeratosis Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
x .. Lesion present
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1-4 .. Lesion qualified as:
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2) Mild 4) Marked
Page 74

	DAY ON TEST																									females (cont...)	
	0 7 3 2	0 7 3 2	0 7 3 2	0 7 3 1	0 6 3 8	0 7 3 1	0 6 7 3	0 6 3 4	0 6 9 2	0 7 3 1	0 7 3 2	0 6 8 3	0 7 3 1	0 7 3 2	0 6 3 1	0 7 3 2	0 7 3 1	0 7 3 2	0 7 3 1	0 7 3 2	0 7 3 1	0 7 3 2	0 7 3 1	0 7 3 2	0 7 3 1		
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	0	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
NERVOUS SYSTEM																											
Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
RESPIRATORY SYSTEM																											
Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body		X	X							X											X						
Inflammation, Chronic Active	1	1	1				1		1				1					1	2			2					
Metaplasia, Squamous									1															2			
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hemorrhage																3								2			
Inflammation, Chronic Active																						2		2			
Alveolar Epithelium, Hyperplasia				1							2			1	1					1		1		1			
Alveolus, Infiltration Cellular, Histiocyte	1	1		1		1	1			2	2		1	1	1				1			2		2	1		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Foreign Body																									X	X	
Inflammation, Chronic Active				1	1		1			1	1		1						1	1	2			2			
Epithelium, Accumulation, Hyaline Droplet	1	1	1	1		1	1	1	1	1	1	1	1	2	1	1	1	1			1		1	1	1	1	
Glands, Hyperplasia																							2				
Olfactory Epithelium, Hyperplasia			1																								
Olfactory Epithelium, Metaplasia, Respiratory																							2				
Respiratory Epithelium, Hyperplasia																							1		1	1	

* .. 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	0	0	0
		7	7	7	7	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7
		3	3	3	3	3	3	7	3	9	3	3	3	8	3	3	1	1	3	3	2	3	3	3	3	
		2	2	2	1	8	1	7	3	4	2	1	2	3	1	2	6	2	2	1	6	1	2	2	0	
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	

females (cont...)

Respiratory Epithelium, Metaplasia, Squamous

Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
---------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lens, Cataract																									3
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Zymbal's Gland																									+

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																									
Nephropathy, Chronic	2	2	2	1		1	1			1	1	2	2	3	1					1	2	2	2	1	2
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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 + .. 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. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
 Time Report Requested: 10:20:06
 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0 0																									
	7 7 7 6 4 6 7 7 7 7 7 6 7 6 7 7 4 7 7 7 7 7 7 7 7 6																									
FISCHER 344 RATS FEMALE CONTROL ANIMAL ID	3 3 0 3 3 6 3 3 3 3 3 3 3 4 3 3 9 3 3 3 3 3 3 8																									
	0 1 1 9 8 0 2 2 2 1 2 2 3 1 7 0 2 3 2 2 0 0 2 0 7																									
	0 0																									
	0 0																									
	1 1																									
	2 2 2 2 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 5																									
	6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																									
	* TOTALS																									

GENITAL SYSTEM

Clitoral Gland Hyperplasia Inflammation, Chronic Active	+ + + + + + + + + + + + + + + + + + M + + + + 49																									
	3 2 1 1 2 1 2 1 2 1 2 1 2 2 2 2																									
	3 3.0																									
	22 1.5																									
Ovary Cyst	+ 50																									
	4																									
	3 3.3																									
Uterus	+ 50																									
Vagina Muscularis, Hypertrophy	+ 3																									
	2 3.0																									

HEMATOPOIETIC SYSTEM

Bone Marrow Hyperplasia, Histiocytic	+ 50																									
	4																									
	1 4.0																									
Lymph Node Inflammation, Chronic Active	+ 1																									
	3																									
	1 3.0																									
Lymph Node, Bronchial Angiectasis	M M M M M + M M M M M M M M M M M M M M M M M M 1																									
	2																									
	1 2.0																									
Lymph Node, Mandibular	M 0																									

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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	0																								* TOTALS	
	7																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

Lymph Node, Mediastinal	+ + M M + M + + + + + + M + + M + + + + M + + + +																								34	
Lymph Node, Mesenteric Hyperplasia, Lymphoid Infiltration Cellular, Histiocyte	+ + + + M +																								49	1 2.0
	2 1 + 3 2 1 2 2 1 2 1 3 3 4 4 4 4 4 4 4 4 4 4 4 4																									1 2.0
Spleen Hematopoietic Cell Proliferation Hemorrhage, Chronic Infarct, Chronic	+ +																								50	33 1.8
	2 1 + 3 2 1 2 2 1 2 1 3 3 4 4 4 4 4 4 4 4 4 4 4 4																									1 3.0
	2 1 + 3 2 1 2 2 1 2 1 3 3 4 4 4 4 4 4 4 4 4 4 4 4																									1 3.0
Thymus Cyst	M + + + + + + + + + + + M + + + + M + + + + + + + + +																								46	1 2.0

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Hyperplasia	+ +																								50	1 4.0
	+ +																									1 4.0
Skin Hyperkeratosis Inflammation, Chronic Active	+ +																								50	1 2.0
	+ +																									1 2.0

MUSCULOSKELETAL SYSTEM

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I .. Insufficient tissue

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

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	6	4	6	7	7	7	7	7	6	7	6	7	7	4	7	7	7	7	7	7	6		
	3	3	0	3	3	6	3	3	3	3	3	3	3	4	3	3	9	3	3	3	3	3	3	8		
	0	1	1	9	8	0	2	2	2	1	2	2	3	1	7	0	2	3	2	2	0	0	2	0	7	

FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONTROL	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																									* TOTALS	
Bone	+ +																								50	

NERVOUS SYSTEM																										

Brain	+ +																								50	

RESPIRATORY SYSTEM																										

Larynx	+ +																								50	
Foreign Body				X									X				X	X								
Inflammation, Chronic Active	1										1	1		1	1	1					1	1				
Metaplasia, Squamous																	1									
																									8	
																									18 1.1	
																									3 1.3	

Lung	+ +																								50	
Hemorrhage												2						2								
Inflammation, Chronic Active	3													2								2				
Alveolar Epithelium, Hyperplasia										2					1	2		1								
Alveolus, Infiltration Cellular, Histocyte	2	1	1		1	1	2	1	2	2	1	2			2		1	1		1	1					
																									4 2.3	
																									6 2.2	
																									11 1.3	
																									30 1.4	

Nose	+ +																								50	
Foreign Body				X										X							X					
Inflammation, Chronic Active				1		1			1	2	2		1	1	1		1		1	2			2	1		
Epithelium, Accumulation, Hyaline Droplet	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Glands, Hyperplasia			2	2						2				2	2											
Olfactory Epithelium, Hyperplasia																										
Olfactory Epithelium, Metaplasia, Respiratory																									1	
Respiratory Epithelium, Hyperplasia																							1		2	
																									6	
																									24 1.3	
																									48 1.1	
																									6 2.0	
																									1 1.0	
																									3 1.7	
																									5 1.2	

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
DAY ON TEST	7	7	7	6	4	6	7	7	7	7	7	7	6	7	6	7	7	4	7	7	7	7	7	7	6		
	3	3	0	3	3	6	3	3	3	3	3	3	3	3	4	3	3	9	3	3	3	3	3	3	8		
	0	1	1	9	8	0	2	2	2	1	2	2	3	1	7	0	2	3	2	2	0	0	2	0	7		
FISCHER 344 RATS FEMALE	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
CONTROL	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	* TOTALS	
Respiratory Epithelium, Metaplasia, Squamous																								2	1 2.0		
Trachea		+																						50			
SPECIAL SENSES SYSTEM																											
Eye		+																						50			
Lens, Cataract		3															3								3	4 3.0	
Harderian Gland		+																						50			
Zymbal's Gland																								1			
URINARY SYSTEM																											
Kidney		+																						49			
Cyst																								3			
Nephropathy, Chronic		2			1			3			1				2			2								2	35 1.7
Urinary Bladder		+																						50			

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 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 Page 83
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	0																								
	7	5	7	7	6	7	7	7	7	7	4	6	7	6	7	7	7	7	7	7	7	6	7	7	
FISCHER 344 RATS FEMALE 125 PPM ANIMAL ID	0																								
	3	2	3	3	3	3	3	3	3	3	9	1	3	3	3	3	3	3	3	3	3	0	3	3	
125 PPM ANIMAL ID	0																								
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2

females
(cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis							4									3									
Basophilic Focus	3		3	3	3	3	3	3	3			3	3	3	3	3	3	3	3	3	3	3	3	3	3
Clear Cell Focus	2		2	2	3	2		3	2	1		2			2		2	2	2	2	3	2		2	2
Hepatodiaphragmatic Nodule					4			4	4					4				4	4						
Mixed Cell Focus																				3					
Vacuolization Cytoplasmic	2		2	2	2	2	2	2	1	1		1		1	2		2	2	2	1	2	2		2	1
Mesentery	+		+		+		+		+			+	+	+	+	+	+		+				+	+	+
Necrosis	3		3		3		3		3			3	3	3	3	3	3		3				3	3	3

* .. 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	0	0	
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
125 PPM		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
ANIMAL ID		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Pancreas Acinus, Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
				1					2		1							2		2					
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Glandular Erosion Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tongue Hyperplasia, Squamous	+																								

CARDIOVASCULAR SYSTEM

Heart Cardiomyopathy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	2		1	2		1	1	2	2	1			1		1	1	1	2	1		2				2

ENDOCRINE SYSTEM

Adrenal Cortex Hyperplasia Vacuolization Cytoplasmic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	2		1	2	1	2	2	1	2				2	2	1	2	2	2		1		1		2	
	3					4		2	2	4						2		2						3	1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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TDMS No. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
 Time Report Requested: 10:20:06
 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0 0																							
	7 5 7 7 6 7 7 7 7 7 4 6 7 6 7 7 7 7 7 7 7 6 7 7																							
FISCHER 344 RATS FEMALE 125 PPM ANIMAL ID	3 2 3 3 3 3 3 3 3 3 3 9 1 3 3 3 3 3 3 3 3 3 0 3 3																							
	2 8 1 1 5 2 1 1 2 0 1 8 1 2 1 0 2 1 1 1 2 2 3 1 1																							
125 PPM ANIMAL ID	0 0																							
	0 0																							
	3 3																							
	0 0																							
	1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8 9 0 1 2 3 females (cont...)																							

Hyperplasia	2																							
Islets, Pancreatic Hyperplasia	+ +																							
Parathyroid Gland	+ +																							
Pituitary Gland Cyst	4																							
Hemorrhage Pars Distalis, Hyperplasia	2 2 1 2 3 3																							
Thyroid Gland Ultimobranchial Cyst	+ +																							
C-cell, Hyperplasia	2 1 2 3 3 2 2 2 2 2 1 2 1 2 1 2 1 2 2 2 2 2 2 2																							
Follicular Cell, Hyperplasia	2																							

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

Clitoral Gland	+ +																							
Hyperplasia	2 4 4																							
Inflammation, Chronic Active	2 2 2 2 2 1 1 2 1 2 2 2 2																							
Ovary	+ +																							

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 x .. Lesion present
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 Page 86
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TDMS No. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

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 1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
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 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7	5	7	7	6	7	7	7	7	4	6	7	6	7	7	7	7	7	7	7	7	6	7	7		
	3	2	3	3	3	3	3	3	3	9	1	3	3	3	3	3	3	3	3	3	3	0	3	3		
	2	8	1	1	5	2	1	1	2	0	1	8	1	2	1	0	2	1	1	1	2	2	3	1	1	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
125 PPM	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Cyst	4																								
Uterus	+																								
Hemorrhage																3			4						
Hydrometra																3									

HEMATOPOIETIC SYSTEM

Bone Marrow	+																									
Hyperplasia, Histiocytic	+																									
Lymph Node	+																									
Deep Cervical, Ectasia						3																				
Deep Cervical, Hyperplasia, Lymphoid																										
Lymph Node, Bronchial	M	M	M	M	M	M	M	M	M	M	M	+	M	+	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal	+	M	+	M	+	+	+	+	M	+	M	+	+	M	+	+	M	M	+	+	+	+	M	M	M	
Lymph Node, Mesenteric	+																									
Spleen	+																									
Hematopoietic Cell Proliferation	2		2		2	2	1	1					2		1	1	2		2	2	2	2	1	2	2	
Infarct, Chronic																										
Inflammation, Granulomatous	4																									

* .. 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 87

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE 125 PPM		7	5	7	7	6	7	7	7	7	4	6	7	6	7	7	7	7	7	7	7	6	7	7	3	3
ANIMAL ID		3	2	3	3	3	3	3	3	3	9	1	3	3	3	3	3	3	3	3	3	0	3	3	2	2
		2	8	1	1	5	2	1	1	2	0	1	8	1	2	1	0	2	1	1	1	2	2	3	1	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	

females (cont...)

Lymphoid Follicle, Atrophy																									
Thymus	+	+	+	+	+	+	+	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	M	+

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperkeratosis																									
Hyperplasia, Squamous																									
Inflammation, Suppurative, Chronic																									
Inflammation, Chronic Active																									
Ulcer																									

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Peripheral Nerve																									

* .. 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 88

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE 125 PPM		0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	5	7	7	6	7	7	7	7	7	4	6	7	6	7	7	7	7	7	7	7	7	6	7	7	
		3	2	3	3	3	3	3	3	3	3	9	1	3	3	3	3	3	3	3	3	3	3	0	3	3	
		2	8	1	1	5	2	1	1	2	0	1	8	1	2	1	0	2	1	1	1	2	2	3	1	1	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
		0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	1	3	4	5	6	7	8	9	0	1	2	3	4	5	

females (cont...)

Spinal Cord +

RESPIRATORY SYSTEM

Larynx	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body												X			X				X							
Inflammation, Chronic Active				1	2			1	1	1	1		2		2			1	2	2	1		1			1
Metaplasia, Squamous																										
Respiratory Epithelium, Hyperplasia																							1			
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage													4		2											
Inflammation, Chronic Active						2	2							2								2				
Alveolar Epithelium, Hyperplasia						2								2				2							1	1
Alveolus, Infiltration Cellular, Histiocyte	2			1		2	2	2	2	2	1			2			2	2	2	1	2		1	2		2
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Foreign Body				X								X														
Inflammation, Suppurative, Chronic																										
Inflammation, Chronic Active				1	1	1	2	1	2	2	1		2	2		2		1	1	1	1		1	1	2	1
Epithelium, Accumulation, Hyaline Droplet	2		2	2	1	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	1	2	2
Glands, Hyperplasia				2					2	2	2	2	2	2			2	2	2	2		2	2	2		
Olfactory Epithelium, Metaplasia, Respiratory						1																				
Respiratory Epithelium, Hyperplasia						1						1														
Respiratory Epithelium, Metaplasia, Squamous																										
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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 Page 89

DAY ON TEST	ANIMAL ID																								
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	5	7	7	6	7	7	7	7	7	4	6	7	6	7	7	7	7	7	7	7	7	6	7	7	
3	2	3	3	3	3	3	3	3	3	9	1	3	3	3	3	3	3	3	3	3	3	0	3	3	
2	8	1	1	5	2	1	1	2	0	1	8	1	2	1	0	2	1	1	1	2	2	3	1	1	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
125 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
	females (cont...)																								

Inflammation, Chronic Active 1 1

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lens, Cataract																					3	3		
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Zymbal's Gland																								

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																								
Nephropathy, Chronic	2	2			1	3	1	1	2	1	1		1	1		3		2	2	3	1	3		
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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 + .. Tissue examined microscopically
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 I .. Insufficient tissue
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	0																								* TOTALS	
	0																									
	7	7	7	5	7	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	6	5		
	3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7	
	0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7	
FISCHER 344 RATS FEMALE 125 PPM ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Angiectasis																											2 3.5
Basophilic Focus	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	43 3.0
Clear Cell Focus	2	2	1	3	2		2		2	X	2			4	2	2			2	2				2	2		34 2.1
Hepatodiaphragmatic Nodule	4																						4	4			9 4.0
Mixed Cell Focus																3											2 3.0
Vacuolization Cytoplasmic	2	1	1	3	2	2	1	1	2	3	3		2	2	2	2	2	3	2		2		2	2			41 1.9
Mesentery		+			+	+	+	+		+	+	+		+	+					+	+						26
Necrosis		3			3	3	3	3		3	3	3		3	3					3	3						26 3.0

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BLANK .. Not examined microscopically
1-4 .. Lesion qualified as:
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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	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE		7	7	7	5	7	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5		
125 PPM		3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7		
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	0	* TOTALS

Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Acinus, Atrophy		2							2			1		1			1		1		2						12 1.5
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Ulcer											2						1		2								3 1.7
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Erosion																	1										1 1.0
Ulcer									1																		1 1.0
Tongue																											1
Hyperplasia, Squamous																											1 2.0

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cardiomyopathy	2	1	1		2	1	1	1			1			1	2	2			2		2		1	2	1		32 1.4

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Hyperplasia	2	1			2		2	2		1	2							2	2	2	2	2		1			30 1.7
Vacuolization Cytoplasmic			1	4					2	2						2			2		1						16 2.3
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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 Page 92
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7	7	7	5	7	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5		
	3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7		
	0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7		
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
125 PPM	0	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	* TOTALS	
Hyperplasia	1			2	2	2					1	2	1			2										9 1.7	
Islets, Pancreatic Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 3 3.0	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	48	
Pituitary Gland Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1 4.0	
Pituitary Gland Hemorrhage																3										4 2.8	
Pituitary Gland Pars Distalis, Hyperplasia			2			3		2									4				2			3		11 2.4	
Thyroid Gland Ultimobranchial Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50 1 2.0	
Thyroid Gland C-cell, Hyperplasia	2																									36 1.9	
Thyroid Gland Follicular Cell, Hyperplasia	1		2		3	2	2	1	2	1	3	2		2	2	1				2	2		2	2		1 2.0	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Clitoral Gland Hyperplasia										2		3															5 3.0
Clitoral Gland Inflammation, Chronic Active	2	2	1		2		2	2		2	2				2					2	1		2	2		26 1.8	
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

* .. 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 93

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	7	5	7	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5
	3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7
	0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125 PPM	0	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	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

Cyst 1 4.0

Uterus + 50

Hemorrhage 2 3.5

Hydrometra 1 3.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																											
Hyperplasia, Histiocytic																								4	1	4.0																										
Lymph Node																								+	+	3																										
Deep Cervical, Ectasia																										1	3.0																									
Deep Cervical, Hyperplasia, Lymphoid																									3	1	3.0																									
Lymph Node, Bronchial	M	M	M	+	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	4																											
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	0																											
Lymph Node, Mediastinal	+	+	+	+	M	+	M	+	M	+	+	+	+	+	M	+	M	M	M	M	+	M	+	+	M	30																										
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	49																										
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50																											
Hematopoietic Cell Proliferation																								4	1	2	2	2	2	2	4	2	2	1	2												32	1.9				
Infarct, Chronic																																																		1	4.0	
Inflammation, Granulomatous																								4																											2	4.0

* .. 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	0	0	0	0	
FISCHER 344 RATS FEMALE		7	7	7	5	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5	
125 PPM		3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	9	7	
ANIMAL ID		0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																								* TOTALS		

Lymphoid Follicle, Atrophy 2 **1 2.0**

Thymus + + + + + + + + + + + + + M + + + + + + + M + + + + **45**

INTEGUMENTARY SYSTEM

Mammary Gland + **50**

Skin + **50**

Hyperkeratosis 2 **2 2.0**

Hyperplasia, Squamous **1 2.0**

Inflammation, Suppurative, Chronic **1 4.0**

Inflammation, Chronic Active 2 3 **2 2.5**

Ulcer 2 **1 2.0**

MUSCULOSKELETAL SYSTEM

Bone + **50**

NERVOUS SYSTEM

Brain + **50**

Angiectasis **1 3.0**

Peripheral Nerve **1**

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
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I .. Insufficient tissue
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1) Minimal 3) Moderate
2) Mild 4) Marked
Page 95

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DAY ON TEST		7	7	7	5	7	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5
DAY ON TEST		3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7
DAY ON TEST		0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7
FISCHER 344 RATS FEMALE		0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125 PPM		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
																										* TOTALS
Spinal Cord																										1

RESPIRATORY SYSTEM

Larynx		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50					
Foreign Body			X					X						X												6					
Inflammation, Chronic Active		1	2			2		2	3				1		2	2			1	1	1				2	25 1.5					
Metaplasia, Squamous									2															1		2 1.5					
Respiratory Epithelium, Hyperplasia									2																	1 1.0					
Lung		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50					
Hemorrhage						2	2		2																		6 2.3				
Inflammation, Chronic Active								2				2			2						2				2		10 2.0				
Alveolar Epithelium, Hyperplasia						2	2		2											1		1					10 1.6				
Alveolus, Infiltration Cellular, Histiocyte				1		2		2	2	2	2				2				2	1	2			2	2	1	2	30 1.8			
Nose		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50					
Foreign Body								X					X							X			X				6				
Inflammation, Suppurative, Chronic																							4				1 4.0				
Inflammation, Chronic Active		1	1	2	1	1		2	3	2	1	1	3						1	1	1			2	2	2	2	37 1.5			
Epithelium, Accumulation, Hyaline Droplet		2	2	2	1	2	2	1	2	2	2	2	2	2	2	1	1			1	1	2			2	1	1	2	1	2	48 1.8
Glands, Hyperplasia		2	2			2		2					2	2									3	2				23 2.0			
Olfactory Epithelium, Metaplasia, Respiratory												1								2			3					4 1.8			
Respiratory Epithelium, Hyperplasia				2		1		1	1	1		1	2							1				2	2			1		13 1.3	
Respiratory Epithelium, Metaplasia, Squamous									2																			1 2.0			
Trachea		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50				

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

Page 96

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	5	7	7	7	7	6	7	5	6	7	7	7	6	4	7	7	7	7	7	6	5	
	3	3	3	9	1	3	3	3	3	8	3	7	2	1	3	3	5	3	3	0	3	3	3	9	7
	0	1	1	0	9	1	0	0	1	7	2	5	8	6	0	0	9	3	1	8	2	0	0	7	7
FISCHER 344 RATS FEMALE 125 PPM ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
	* TOTALS																								

Inflammation, Chronic Active	1				1									4										1.0
------------------------------	---	--	--	--	---	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	-----

SPECIAL SENSES SYSTEM

Eye	+ 50																							
Lens, Cataract	3													3										3.0
Harderian Gland	+ 50																							
Zymbal's Gland																					+			1

URINARY SYSTEM

Kidney	+ 50																										
Cyst																	4							1		4.0	
Nephropathy, Chronic	2	4				2		2		3	1	4	1	2	1	2	2	3		3	2		3	35			2.0
Urinary Bladder	+ 50																										

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M .. Missing tissue
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1-4 .. Lesion qualified as:
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2) Mild 4) Marked
Page 97

DAY ON TEST	25																									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7		
3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3		
2	7	0	1	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1	

FISCHER 344 RATS FEMALE 250 PPM ANIMAL ID	25																									females (cont...)	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	A	+	+	A	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																										2	
Basophilic Focus	3		3	3	3	3	3	3	3				3	3	3	3	3			3					3	3	
Clear Cell Focus	2		2	2	2			2	3	3			2	3	3	2	2			3			3	2			
Eosinophilic Focus																											3
Hepatodiaphragmatic Nodule		4											4													4	
Mixed Cell Focus						3			X											3							
Necrosis		2																									
Vacuolization Cytoplasmic	2	1	2	2	1	2		2	3	2			1	2	4	2	2	2	1				2	3	2		2
Mesentery	+	+	+											+								+					+

* .. 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				
		7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7	
		3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3	
		2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1	
FISCHER 344 RATS FEMALE		0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	
Necrosis		3		3										3					3			3					
Oral Mucosa Foreign Body Hyperplasia, Squamous																											
Pancreas Acinus, Atrophy		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
				1	2											1				1							
Salivary Glands Hyperplasia Necrosis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stomach, Forestomach Hyperplasia, Squamous Ulcer		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
																				2	1						
Stomach, Glandular Ulcer		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
				2																							
Tooth Inflammation, Chronic Active																										+	3

CARDIOVASCULAR SYSTEM

Blood Vessel																												

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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	ANIMAL ID																								females (cont...)
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7	0
3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3	0
2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1	0

FISCHER 344 RATS FEMALE

250 PPM

females (cont...)

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	1		1	1	1	1		1		1		1	3	1	1	1		1		1	1		1	

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Degeneration, Cystic													4											
Hyperplasia	2			1		1						3			1	2	2	1	1					2
Vacuolization Cytoplasmic	3											4	1		1									
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia						1	1						2											
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																				1		2		
Metaplasia, Hepatocyte												1												
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	M	+
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																								
Hemorrhage	4						2		2		2													
Pars Distalis, Hyperplasia				2		4						2						2						
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C-cell, Hyperplasia	2		2	1	2	2		2		2		2		2	1	2			1		1		1	2
Follicular Cell, Hyperplasia																								2

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

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7
		3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3
		2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1
FISCHER 344 RATS FEMALE		0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia					4					4	4								4			1				
Inflammation, Chronic Active					2	4				2			2		1		1	1		2						2
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst												3			4											4
Interstitial Cell, Hyperplasia																										
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Congestion																										
Endometrium, Hyperplasia																										2

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Histiocytic																										
Lymph Node																										
Lymph Node, Bronchial	M	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Angiectasis																										

* .. 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	0	0	
		7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	6	7	5	6	4	6	7	
		3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3
		2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM		0	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		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

females (cont...)

2

Hemorrhage																										
Lymph Node, Mandibular	M	M	M	+	M	M	M	+	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal Angiectasis	+	M	M	+	+	M	+	+	M	+	M	M	+	M	+	+	+	M	+	+	M	M	+	M	+	
Lymph Node, Mesenteric Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Hematopoietic Cell Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage, Chronic		1	2		3	2					2			2	2		2	2	2		1		1		2	
Infarct, Chronic							3																			
Thymus	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	+	+	+	+	+	+	

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active														4		4										2
Skin Hyperkeratosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																										
Ulcer																										

* .. 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
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 Page 102

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7	0
		3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3	0
		2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1	0
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	2	2	2	3	4	5	females (cont...)

MUSCULOSKELETAL SYSTEM

Bone	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skeletal Muscle																										+

NERVOUS SYSTEM

Brain Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

RESPIRATORY SYSTEM

Larynx Foreign Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active				X																						
Metaplasia, Squamous					1	1	1	1					1	1	1	2					2			1		
Lung Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active					4																2					
Alveolar Epithelium, Hyperplasia														1							2					2
Alveolus, Infiltration Cellular, Histiocyte																										
Nose Foreign Body	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
					X									X												

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

TDMS No. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	6	7	5	6	4	6	7			
	3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	2	3	5	8	1	0	3			
	2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	8	1	4	8	7	6	1			

FISCHER 344 RATS FEMALE 250 PPM ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	2	3	4	5

females
(cont...)

Inflammation, Suppurative, Chronic																											
Inflammation, Chronic Active		1	2	2			1	1		2	1			2	1	1	1	2	1		1	1	1	1	2		
Epithelium, Accumulation, Hyaline Droplet	2	2	1	2		1	2	2	2	2	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Glands, Hyperplasia		2	2				2			2	2			2	2	2			2				2	2	2	2	
Olfactory Epithelium, Metaplasia, Respiratory							2							1													1
Respiratory Epithelium, Hyperplasia			1	1									2														1
Respiratory Epithelium, Metaplasia, Squamous				1			1																				

Pleura																												+
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																												1

SPECIAL SENSES SYSTEM

Ear																												
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cornea, Inflammation, Chronic Active																												1
Lens, Cataract															3								3	3				
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																												
Zymbal's Gland																												

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1-4 .. Lesion qualified as:
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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	0	0	0	0	0
	7	5	7	7	6	7	5	7	6	7	6	6	7	6	7	7	7	7	6	7	5	6	4	6	7
	3	4	3	3	8	3	4	3	0	3	4	0	3	9	3	3	3	3	2	3	5	8	1	0	3
	2	7	0	1	1	1	1	1	7	2	2	7	1	4	2	0	0	0	8	1	4	8	7	6	1
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	0	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Nephropathy, Chronic	2		1		2	2	1		1	2	1		4		2	2	3								2
Cortex, Infarct																									
Cortex, Renal Tubule, Accumulation, Hyaline Droplet																									4
Pelvis, Inflammation, Suppurative																									1
Pelvis, Inflammation, Chronic Active																									
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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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	0	0	0		
	7	7	6	7	7	7	4	7	7	7	6	7	7	7	7	6	7	7	5	6	6	7	7	7	
	1	3	1	3	3	3	5	3	3	3	8	3	3	3	3	8	3	3	3	8	8	3	3	3	
	8	2	8	0	1	1	1	2	0	2	4	2	1	1	2	1	4	2	1	4	0	8	2	1	1
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
* TOTALS																									

ALIMENTARY SYSTEM

Esophagus	+ +																							50			
Intestine Large, Cecum	+ +																							47			
Intestine Large, Colon	+ +																							48			
Intestine Large, Rectum	+ +																							48			
Intestine Small, Duodenum	+ +																							47			
Intestine Small, Ileum	+ +																							47			
Intestine Small, Jejunum	+ +																							47			
Liver	+ +																							50			
Angiectasis																				3			2 2.5				
Basophilic Focus	3	3		3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		42 3.0		
Clear Cell Focus	2	2	2	2	3			2	2	2	3	3	2	2	3			2	2		4	3		3	3	35 2.4	
Eosinophilic Focus																											1 3.0
Hepatodiaphragmatic Nodule																								4			5 4.0
Mixed Cell Focus																											3 3.0
Necrosis																											1 2.0
Vacuolization Cytoplasmic	3	1	3	2	3			1	2	2	3	3	2	2	2			2	2		3	2		3	2	39 2.1	
Mesentery	+				+ +		+ + + +							+		+		+							17		

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 2) Mild 4) Marked

	DAY ON TEST																								* TOTALS
	0 7 1 8	0 7 3 2	0 6 1 8	0 7 3 0	0 7 3 1	0 7 3 1	0 4 5 1	0 7 3 2	0 7 3 0	0 7 3 2	0 6 8 4	0 7 3 2	0 7 3 1	0 7 3 1	0 7 3 2	0 6 8 4	0 7 3 2	0 7 3 1	0 5 3 4	0 6 8 0	0 6 8 2	0 7 3 1	0 7 3 1		
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
250 PPM	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
Necrosis	3			3	3		3	3	3	3					3		3		3			3	16 3.0		
Oral Mucosa																									
Foreign Body																								1	
Hyperplasia, Squamous																								1	
																								1 3.0	
Pancreas																									
Acinus, Atrophy																								50	
																								7	
																								1.6	
Salivary Glands																									
Hyperplasia																								50	
Necrosis																								1	
																								1 1.0	
																								4	
																								1 4.0	
Stomach, Forestomach																									
Hyperplasia, Squamous																								50	
Ulcer																								2	
																								2	
																								2 2.0	
																								3	
																								3 2.0	
Stomach, Glandular																									
Ulcer																								50	
																								1	
																								1 2.0	
Tooth																									
Inflammation, Chronic Active																								1	
																								1 3.0	

CARDIOVASCULAR SYSTEM

Blood Vessel																								
																								2

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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	0	0	0	0
	7	7	6	7	7	7	4	7	7	7	6	7	7	7	7	6	7	7	5	6	6	7	7	7
	1	3	1	3	3	3	5	3	3	3	8	3	3	3	3	8	3	3	3	8	8	3	3	3
	8	2	8	0	1	1	1	2	0	2	4	2	1	1	2	1	4	2	1	4	0	8	2	1
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 PPM	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	
* TOTALS																								

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cardiomyopathy	2			2		2	1	2		1	1	2	2	1	2	2	2	1	1		2		2	1	1	34 1.4

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Degeneration, Cystic																										1 4.0
Hyperplasia	2	4		1		2		1	1	2				2	2	2	2	2					2	3	24 1.8	
Vacuolization Cytoplasmic		2	1		2				1	1	2		4	3	2	2				3			2		16 2.1	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia					2	2		1											1							7 1.4
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia					2																			3	4 2.0	
Metaplasia, Hepatocyte			1																						2 1.0	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	47	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst																				3	3				2 3.0	
Hemorrhage			3												3										5 2.8	
Pars Distalis, Hyperplasia			2		4																2				7 2.6	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
C-cell, Hyperplasia	3	2	1	2	2	2	1	2	2		2		2	2	2	2	4	2	1	1	2	2	2		37 1.8	
Follicular Cell, Hyperplasia																					2				2 2.0	

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l .. Insufficient tissue

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	DAY ON TEST																									* TOTALS
	0718	0719	0720	0721	0722	0723	0724	0725	0726	0727	0728	0729	0730	0731	0801	0802	0803	0804	0805	0806	0807	0808	0809	0810	0811	
FISCHER 344 RATS FEMALE	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	49
Hyperplasia					2			2								2					2				9 2.8
Inflammation, Chronic Active	4	1		2	1	1		2	2	2		2	2		2	2	2		2		2	2	1		26 1.9
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Cyst	4				4			4													4				7 3.9
Interstitial Cell, Hyperplasia					4																				1 4.0
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Congestion																							2		1 2.0
Endometrium, Hyperplasia																									1 2.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia, Histiocytic									4																1 4.0	
Lymph Node							+																		2	
Lymph Node, Bronchial	M	M	M	M	M	M	M	M	+	M	+	M	M	M	M	M	+	M	M	M	M	M	+	M	M	5
Angiectasis								3		3																2 3.0

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 BLANK .. Not examined microscopically
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 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	0	0	0
	7	7	6	7	7	7	4	7	7	7	6	7	7	7	7	6	7	7	5	6	6	7	7	7	
	1	3	1	3	3	3	5	3	3	3	8	3	3	3	3	8	3	3	3	8	8	3	3	3	
	8	2	8	0	1	1	1	2	0	2	4	2	1	1	2	1	4	2	1	4	0	8	2	1	
.....																									
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
																								* TOTALS	

Hemorrhage																								1 2.0		
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	2	
Lymph Node, Mediastinal Angiectasis	+	+	M	M	+	+	+	+	M	+	M	+	+	+	M	+	M	+	+	+	M	+	M	+	+	31
																								2 3.5		
Lymph Node, Mesenteric Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
																								1 4.0		
Spleen Hematopoietic Cell Proliferation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hemorrhage, Chronic	2	2		2	1			2	2	1	2	2	1	2	2			2	2				2	2	29 1.8	
Infarct, Chronic																								1 3.0		
																								1 3.0		
Thymus	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	M	+	+	+	+	+	45	

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																								3 4.0	
																								1 2.0	
Skin Hyperkeratosis Inflammation, Chronic Active Ulcer	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
																								2 2.5	
																								1 2.0	
																								1 2.0	

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Page 110

DAY ON TEST	0 0																							
	7 7 6 7 7 7 4 7 7 7 6 7 7 7 7 6 7 7 5 6 6 7 7 7																							
FISCHER 344 RATS FEMALE 250 PPM ANIMAL ID	1 3 1 3 3 3 5 3 3 3 8 3 3 3 3 8 3 3 3 8 8 3 3 3																							
	8 2 8 0 1 1 1 2 0 2 4 2 1 1 2 1 4 2 1 4 0 8 2 1 1																							
* TOTALS	0 0																							
	0 0																							
	5 5																							
	2 2 2 2 3																							
6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0																								

MUSCULOSKELETAL SYSTEM

Bone	+ +																								50
Skeletal Muscle																									1

NERVOUS SYSTEM

Brain Hemorrhage	+ +																								50	1	2.0
------------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----	---	-----

RESPIRATORY SYSTEM

Larynx	+ +																								50		
Foreign Body																										X	3
Inflammation, Chronic Active	1 2 1 1 3 1 1 1 1 1 1 2 1 1 2 1 1 2 2 2																								30	1.4	
Metaplasia, Squamous	2 2 2 2 2 2 2 1 2 3 2 2 2 2 2 2 2 2 2 2																								6	1.3	
Lung	+ +																								50		
Hemorrhage	2																								4	2.5	
Inflammation, Chronic Active	1 1 1 4 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2																								12	1.7	
Alveolar Epithelium, Hyperplasia	1 1 1 4 2 1 1 1 3 1 3 2 2 2 2 2 2 2 2 2																								16	1.9	
Alveolus, Infiltration Cellular, Histiocyte	2 2 2 2 2 2 2 1 2 3 2 2 2 2 2 2 2 2 2 2																								29	1.8	
Nose	+ +																								49		
Foreign Body	X X X X X																								6		

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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	0	0	0	0	
		7	7	6	7	7	7	4	7	7	7	6	7	7	7	7	6	7	7	5	6	6	7	7	7	
		1	3	1	3	3	3	5	3	3	3	8	3	3	3	3	8	3	3	3	8	8	3	3	3	
		8	2	8	0	1	1	1	2	0	2	4	2	1	1	2	1	4	2	1	4	0	8	2	1	1
FISCHER 344 RATS FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	250 PPM	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

* TOTALS

Inflammation, Suppurative, Chronic	4								4		4															3 4.0
Inflammation, Chronic Active			1	2		1	1	2		1	2			1	2	2	1	2	2	1	2	2	2	2	1	37 1.5
Epithelium, Accumulation, Hyaline Droplet	2	2	1	2	1	1		2	1	1	2	2	2	2	2	2	2	1	2	2	1	2	1	2	48 1.7	
Glands, Hyperplasia	2		2	2				2			2	3		2		2	2	2	2	2	2	2		2	2	28 2.0
Olfactory Epithelium, Metaplasia, Respiratory	3											3									1					6 1.8
Respiratory Epithelium, Hyperplasia	3									2		1	2				2									9 1.7
Respiratory Epithelium, Metaplasia, Squamous											1	1					1									5 1.0
Pleura																										1
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50
Inflammation, Chronic Active																										1 1.0

SPECIAL SENSES SYSTEM

Ear																											1
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cornea, Inflammation, Chronic Active																										1 1.0	
Lens, Cataract											3											3				5 3.0	
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Inflammation, Chronic Active										2																1 2.0	
Zymbal's Gland																										2	

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TDMS No. 20011 - 05

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 07/09/2008

Test Type: CHRONIC

1-Bromopropane

Time Report Requested: 10:20:06

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 106-94-5

First Dose M/F: 07/14/03 / 07/14/03

Species/Strain: RATS/F 344

Lab: BNW

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	7	6	7	7	7	4	7	7	7	6	7	7	7	7	6	7	7	5	6	6	7	7	7		
	1	3	1	3	3	3	5	3	3	3	8	3	3	3	3	8	3	3	3	8	8	3	3	3		
	8	2	8	0	1	1	1	2	0	2	4	2	1	1	2	1	4	2	1	4	0	8	2	1	1	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
250 PPM	0	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	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	
																								* TOTALS		

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Nephropathy, Chronic	2	2	1	2	2			2	2	2		3	1	2	1	1	2	2			2			1	3	31 1.9
Cortex, Infarct																					2					1 2.0
Cortex, Renal Tubule, Accumulation, Hyaline Droplet																										1 4.0
Pelvis, Inflammation, Suppurative																										1 1.0
Pelvis, Inflammation, Chronic Active																								1		1 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50

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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	0	0	0		
		7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
		3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
		1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	500 PPM	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
	ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Cecum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Colon	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Large, Rectum Inflammation, Suppurative Necrosis	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Duodenum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Ileum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Intestine Small, Jejunum	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Angiectasis																									
Basophilic Focus	3	3	3		3	3	3		3	3	3		3	3	3		3	3	3		3	3			
Clear Cell Focus	2		2	2	3	2	2		2	3	3	3	3	2	2	3		3		2	2	2			
Degeneration, Cystic											2														
Hepatodiaphragmatic Nodule		4	4																						
Mixed Cell Focus																				2	2				
Vacuolization Cytoplasmic	2	3	2	3	3	2	3	1	3	3	4	3	3	3	2	3		3	2	2	2	2	2	1	1
Bile Duct, Cyst																									

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Page 114

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
		3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
		1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
FISCHER 344 RATS FEMALE	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	500 PPM	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Mesentery																										
Necrosis			+	+				+						+	+										+	+
			3	3				3						3	3										3	
Oral Mucosa																										
Foreign Body																										+
Hyperplasia, Squamous																										X
Inflammation, Chronic Active																										2
																										2
Pancreas																										
Acinus, Atrophy			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
									3					2												2
Salivary Glands																										
Inflammation, Chronic Active			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach																										
Hyperplasia, Basal Cell																										
Hyperplasia, Squamous																										2
Ulcer										2																
										3																1
Stomach, Glandular																										
Ulcer			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Tongue																										

CARDIOVASCULAR SYSTEM

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DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
ANIMAL ID		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
		7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
		3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
		1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Blood Vessel

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	2	2	1					1			1	1	1	2	1							1	1		

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia	4	4	4		1		1	2		1	3	2	2	2		1			1		1	1			
Necrosis																									2
Vacuolization Cytoplasmic				2							2						2				2	1	2		

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia		2										1						2							

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia		2								2														2	
Metaplasia, Hepatocyte					1																				

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

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst						1																			
Hemorrhage				3			4											1							
Pars Distalis, Hyperplasia				2										1										2	

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
C-cell, Hyperplasia	1	2	2	1	2		1		1		1	1	2			2		2		2	1	2			1

* .. 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 116
 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	0	0	0
		7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
		3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
		1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
FISCHER 344 RATS FEMALE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM		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		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females
(cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																									
Inflammation, Chronic Active					3							3		1	1	2			3				1	2	
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst	4									4				4											
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																									
Decidual Reaction						4								3											
Hemorrhage										4															
Inflammation, Chronic Active																									

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Histiocytic																								
Lymph Node																								
Pancreatic, Hemorrhage																								

* .. 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	0	0	0
	7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
	3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
	1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM	0	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	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Lymph Node, Bronchial Angiectasis Hemorrhage	M	+	M	M	+	+	M	M	M	M	M	M	M	M	+	M	M	M	M	M	M	M	M	M	M
	2																								
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Lymph Node, Mediastinal Angiectasis Hemorrhage	M	+	+	+	M	M	M	+	M	+	+	M	+	M	M	M	+	+	M	+	M	+	+	+	M
	3																								
	2																								
Lymph Node, Mesenteric Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Spleen Hematopoietic Cell Proliferation Hemorrhage, Chronic Infarct, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	2																								
	2																								
	2																								
	2																								
	2																								
	1																								
	2																								
	1																								
Thymus	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	3																								

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 + .. Tissue examined microscopically
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 I .. Insufficient tissue
 M .. Missing tissue
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 BLANK .. Not examined microscopically
 Page 118
 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	0	0	
		7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	
		3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	
		1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1
FISCHER 344 RATS FEMALE		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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

females (cont...)

Skin Inflammation, Suppurative, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	4																								

MUSCULOSKELETAL SYSTEM

Bone Fracture Inflammation, Suppurative, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	4																								
Skeletal Muscle	+																								

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Peripheral Nerve	+																								
Spinal Cord Cyst Epithelial Inclusion	+																								

RESPIRATORY SYSTEM

Larynx Foreign Body Inflammation, Suppurative, Chronic Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	X																						X		
	4																								
	3		2	1	2	1	2	1	1		3		2		1	1		2	1	2	2		1		1

* .. 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 119

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	6	5	5	7	3	7	7	7	7	7	6	0	7	5	6	6	7	7	5	4	4	
	3	3	3	3	8	0	8	3	8	3	3	3	3	3	6	3	3	2	2	2	3	3	7	3	3	
	1	1	1	1	2	1	6	1	6	2	0	1	2	1	1	0	8	2	9	7	6	2	1	8	1	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	0	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	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5
Metaplasia, Squamous Necrosis	2	2		1	2		2			2						1	2	1	2	2			2	1		
Lung Hemorrhage	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lung Inflammation, Suppurative, Chronic					2							1														
Lung Inflammation, Chronic Active																			4	4					4	
Lung Alveolar Epithelium, Hyperplasia					1																					
Lung Alveolus, Infiltration Cellular, Histocyte	2			1						1	1		2	1	1	1			2			1	1			
Nose Foreign Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Nose Inflammation, Suppurative, Chronic		X		X				X	X										X							
Nose Inflammation, Chronic Active		4		4					4										4							
Nose Epithelium, Accumulation, Hyaline Droplet	1				1	2	1	1		1	2	1	2	1		1							1	1		
Nose Glands, Hyperplasia	2		2	2	2	1	2	1	1	2	2	2	3	2	2	1	1		1	2	2	2	2	2	2	
Nose Olfactory Epithelium, Metaplasia, Respiratory	2	2		2	2		2					3	2	2		2			2	2			2	2		
Nose Respiratory Epithelium, Hyperplasia		3										3	1													
Nose Respiratory Epithelium, Metaplasia, Squamous	2			2						1		1	1					2	1			1		1		
Trachea Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachea Epithelium, Hyperplasia		2																								
Trachea Epithelium, Metaplasia, Squamous		2																								
Trachea Epithelium, Necrosis																						2				

females (cont...)

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																								* TOTALS
	6	7	7	4	1	7	7	7	6	4	6	7	6	6	7	5	4	7	7	7	7	5	7	6	
	1	3	3	5	4	3	3	3	8	5	1	3	0	8	1	9	9	2	3	1	3	8	3	1	3
	1	1	0	3	2	2	2	0	6	0	9	0	6	8	9	0	8	4	1	5	1	6	2	6	1
FISCHER 344 RATS FEMALE	0																								* TOTALS
	0																								
	7																								
	2																								
	6																								
500 PPM																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Mesentery																									23							
Necrosis	+	+		+	+	+								+	+	+	+						+	+								
	3	3		3	3	3								3	3	3	3						3	3								
Oral Mucosa																									1							
Foreign Body																									1							
Hyperplasia, Squamous																									1							
Inflammation, Chronic Active																									2.0							
Pancreas																									50							
Acinus, Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								
		1			2			1															1									
Salivary Glands																									50							
Inflammation, Chronic Active																									1							
Stomach, Forestomach																									50							
Hyperplasia, Basal Cell																									1							
Hyperplasia, Squamous																									2.0							
Ulcer	2																					2	2	2				2				6
Stomach, Glandular																									50							
Ulcer																									1							
Tongue																									1							

CARDIOVASCULAR SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

DAY ON TEST	ANIMAL ID																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	7	7	4	1	7	7	7	6	4	6	7	6	6	7	5	4	7	7	7	7	5	7	6	7	
1	3	3	5	4	3	3	3	8	5	1	3	0	8	1	9	9	2	3	1	3	8	3	1	3	
1	1	0	3	2	2	2	0	6	0	9	0	6	8	9	0	8	4	1	5	1	6	2	6	1	
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	49	
Hyperplasia																										4 4.0
Inflammation, Chronic Active		2			1	2	3	2				2	3					2	2		3					18 2.1
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst																										3 4.0
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Cyst																										1 3.0
Decidual Reaction																										2 3.5
Hemorrhage																										1 4.0
Inflammation, Chronic Active						2																				1 2.0

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	
Hyperplasia, Histiocytic																										1 4.0
Lymph Node																									2	
Pancreatic, Hemorrhage																										1 3.0

* .. 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. 20011 - 05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane

CAS Number: 106-94-5

Date Report Requested: 07/09/2008

Time Report Requested: 10:20:06

First Dose M/F: 07/14/03 / 07/14/03

Lab: BNW

DAY ON TEST	ANIMAL ID																								* TOTALS
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	7	7	4	1	7	7	7	6	4	6	7	6	6	7	5	4	7	7	7	7	5	7	6	7	0
1	3	3	5	4	3	3	3	8	5	1	3	0	8	1	9	9	2	3	1	3	8	3	1	3	0
1	1	0	3	2	2	2	0	6	0	9	0	6	8	9	0	8	4	1	5	1	6	2	6	1	0
FISCHER 344 RATS FEMALE																									
500 PPM																									
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	7
6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	0

Lymph Node, Bronchial Angiectasis Hemorrhage	M	M	M	M	M	M	M	M	M	M	+	M	M	+	M	M	M	M	M	M	M	M	M	+	M	7	1 3.0	
																											1 2.0	
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mediastinal Angiectasis Hemorrhage	+	+	+	+	+	+	M	+	+	+	M	M	M	+	+	M	+	+	M	M	M	+	M	+	M	28	2 3.0	
			3				3																				2 2.5	
Lymph Node, Mesenteric Infiltration Cellular, Histiocyte	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1 2.0	
																	2											
Spleen Hematopoietic Cell Proliferation Hemorrhage, Chronic Infarct, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	21 1.7	
			2			2	1	2	1			2							1	2			1	2	1	2 3.5		
																											1 3.0	
Thymus	+	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	43	

INTEGUMENTARY SYSTEM

Mammary Gland Galactocele Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1 3.0
																											1 3.0

* .. 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. 20011 - 05
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/F 344

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

1-Bromopropane
 CAS Number: 106-94-5

Date Report Requested: 07/09/2008
 Time Report Requested: 10:20:06
 First Dose M/F: 07/14/03 / 07/14/03
 Lab: BNW

DAY ON TEST	0 0																									
	6 7 7 4 1 7 7 7 6 4 6 7 6 6 7 5 4 7 7 7 7 5 7 6 7																									
FISCHER 344 RATS FEMALE 500 PPM ANIMAL ID	1 3 3 5 4 3 3 3 8 5 1 3 0 8 1 9 9 2 3 1 3 8 3 1 3																									
	1 1 0 3 2 2 2 0 6 0 9 0 6 8 9 0 8 4 1 5 1 6 2 6 1																									
* TOTALS																										
Skin Inflammation, Suppurative, Chronic	+ 50																								1 4.0	
MUSCULOSKELETAL SYSTEM																										
Bone Fracture Inflammation, Suppurative, Chronic	+ 50																								4 1 4.0 1 4.0	
Skeletal Muscle	+ + +																								4	
NERVOUS SYSTEM																										
Brain	+ 50																									
Peripheral Nerve	+ +																								3	
Spinal Cord Cyst Epithelial Inclusion	+ + 3																								3 1 3.0	
RESPIRATORY SYSTEM																										
Larynx Foreign Body Inflammation, Suppurative, Chronic Inflammation, Chronic Active	+ 50																								4 3 4.0 32 1.5	
	1 2 1 1 1 2 X X 4 1 1 1 1 2 1 2 2																									

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 Page 127

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	7	7	4	1	7	7	7	6	4	6	7	6	6	7	5	4	7	7	7	7	5	7	6	7		
	1	3	3	5	4	3	3	3	8	5	1	3	0	8	1	9	9	2	3	1	3	8	3	1	3		
	1	1	0	3	2	2	2	0	6	0	9	0	6	8	9	0	8	4	1	5	1	6	2	6	1		
FISCHER 344 RATS FEMALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
500 PPM	0	0	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	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5		
	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	* TOTALS	
Metaplasia, Squamous Necrosis	2								1	2	2			2					2	2		1			21 1.7		
																									1 1.0		
Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Hemorrhage										2												3			4 2.0		
Inflammation, Suppurative, Chronic																						4			4 4.0		
Inflammation, Chronic Active						2																		2	2 2.0		
Alveolar Epithelium, Hyperplasia			1				2	2						1							1		2	2	8 1.5		
Alveolus, Infiltration Cellular, Histiocyte	2	1				2	2	2	1			2		1	2	1			2	1	2		1	2	26 1.5		
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Foreign Body					X	X											X					X			9		
Inflammation, Suppurative, Chronic						4											4					4			7 4.0		
Inflammation, Chronic Active	1	1	1	1	2		2	2	2	2	2	2	1	2		1		1	1	1	1		2	1	1		
Epithelium, Accumulation, Hyaline Droplet	2	2	2	2		2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	47 1.9		
Glands, Hyperplasia	2					2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		30 2.0		
Olfactory Epithelium, Metaplasia, Respiratory					2	3		1									3					2	2		9 2.2		
Respiratory Epithelium, Hyperplasia					1	2	1	2				1				2	2					3	1		18 1.5		
Respiratory Epithelium, Metaplasia, Squamous										2															1 2.0		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50		
Inflammation, Chronic Active													2										2		6 1.7		
Epithelium, Hyperplasia													2										2		4 1.8		
Epithelium, Metaplasia, Squamous																									1 2.0		
Epithelium, Necrosis																							2		1 2.0		

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
 Page 128

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		6	7	7	4	1	7	7	7	6	4	6	7	6	6	7	5	4	7	7	7	7	5	7	6	7
		1	3	3	5	4	3	3	3	8	5	1	3	0	8	1	9	9	2	3	1	3	8	3	1	3
		1	1	0	3	2	2	2	0	6	0	9	0	6	8	9	0	8	4	1	5	1	6	2	6	1
FISCHER 344 RATS FEMALE		0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500 PPM		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5
		6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
		* TOTALS																								

Ear Inflammation, Suppurative, Chronic																									1	1 4.0	
Eye Lens, Cataract	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	2 3.0
Harderian Gland Inflammation, Suppurative, Chronic Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	1 4.0 1 2.0
		2																									

URINARY SYSTEM

Kidney Nephropathy, Chronic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	29 1.9
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	50	

*** END OF REPORT ***