

TDMS No. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)
CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
Time Report Requested: 12:05:16
First Dose M/F: NA / 03/26/04
Lab: BAT

F1_R8

C Number: C20304

Lock Date: 10/12/2006

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25022 ACCK 25021 TSAC 25020 NATD
25019 MSAC 25018 DACC

Removal Date Range: ALL

Treatment Groups: Include 001 0 UG/KG Include 004 100 UG/KG Include 005 220 UG/KG
Include 006 460 UG/KG Include 007 1000 UG/KG Include 008 4600 UG/KG
Include 009 4600 UG/KG STOP

Study Gender: Female

TDMSE Version: 2.0.0

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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	0	0
	4	7	4	3	5	6	7	7	5	5	7	7	7	4	7	5	6	5	5	7	5	7	7	7	4		
	9	3	4	7	0	1	3	3	6	1	3	3	3	4	3	6	5	0	7	3	9	3	3	3	4		
	5	5	3	8	3	7	3	5	1	6	4	5	3	0	4	1	8	3	5	5	3	3	3	3	6		
SPRAGUE-DAWLEY 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	0	0	0	0	
	0	0	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	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	8	
0 UG/KG	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	6	7	8	9	0	6	7	8		

females (cont...)

Proteinosis																										
Alveolar Epithelium, Hyperplasia									2					1							2					
Alveolar Epithelium, Metaplasia, Bronchiolar									2					1					1							
Alveolus, Infiltration Cellular, Histiocyte									2					2					2							
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst																										
Inflammation																										
Olfactory Epithelium, Degeneration																										
Respiratory Epithelium, Degeneration, Focal																										2
Respiratory Epithelium, Hyperplasia																										1
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cornea, Inflammation																										
Retina, Atrophy																										2
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell																										1

URINARY SYSTEM

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DAY ON TEST		0	0
		5	7
		1	0
		2	1
SPRAGUE-DAWLEY RATS		0	0
FEMALE		0	0
0 UG/KG		0	0
ANIMAL ID		7	8
		9	0
			* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	51	
Intestine Large, Cecum	+	+	52	
Intestine Large, Colon	+	+	52	
Parasite Metazoan				1
Intestine Large, Rectum	+	+	52	
Parasite Metazoan				2
Artery, Inflammation, Chronic Active				1 3.0
Intestine Small, Duodenum	+	+	52	
Intestine Small, Ileum	+	+	52	
Intestine Small, Jejunum	+	+	52	
Liver	+	+	52	
Basophilic Focus				11
Basophilic Focus, Multiple		X		4
Clear Cell Focus				6
Clear Cell Focus, Multiple				9
Degeneration, Cystic				1 1.0
Eosinophilic Focus				5
Fatty Change, Focal				2 1.0

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DAY ON TEST		0	0	
		5	7	
		1	0	
		2	1	
.....				
SPRAGUE-DAWLEY RATS		0	0	
FEMALE		0	0	
	ANIMAL ID	0	0	
0 UG/KG		7	8	
		9	0	
				* TOTALS
.....				
Fatty Change, Diffuse				1 1.0
Hematopoietic Cell Proliferation	1			19 1.0
Inflammation				21 1.0
Mixed Cell Focus				6
Mixed Cell Focus, Multiple	X			15
Necrosis				1 1.0
Pigmentation				1 1.0
Bile Duct, Cyst				2 2.5
Bile Duct, Fibrosis				2 1.5
Bile Duct, Hyperplasia				5 1.0
Capsule, Inflammation				1 2.0
Centrilobular, Degeneration				1 2.0
.....				
Mesentery				2
Artery, Inflammation, Chronic Active				1 3.0
.....				
Oral Mucosa				1
.....				
Pancreas	+ +			52
Degeneration				1 2.0
Acinus, Atrophy, Focal				4 1.3
Artery, Inflammation, Chronic Active				1 3.0
.....				
Salivary Glands	+ +			51
.....				
Stomach, Forestomach	+ +			52
Inflammation				2 2.5
Ulcer				2 2.5
.....				

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SPRAGUE-DAWLEY RATS										
FEMALE										
0 UG/KG										
ANIMAL ID	0	0	0	0	0	0	7	8	9	0
* TOTALS										
Stomach, Glandular Cyst	+	+								52
										1 2.0
Tooth Peridental Tissue, Inflammation										10
										7 2.1
CARDIOVASCULAR SYSTEM										
Blood Vessel	+	+								52
Heart Cardiomyopathy	+	+						1		52
										13 1.0
ENDOCRINE SYSTEM										
Adrenal Cortex Atrophy	+	+								52
Adrenal Cortex Degeneration, Cystic										1 2.0
Adrenal Cortex Hematopoietic Cell Proliferation										9 2.1
Adrenal Cortex Hyperplasia							2			1 1.0
Adrenal Cortex Hypertrophy							2			14 2.1
Adrenal Cortex Vacuolization Cytoplasmic										37 1.7
										10 1.4
Adrenal Medulla Hyperplasia	+	+								52
										11 1.7
Islets, Pancreatic	+	+								52

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<hr/>									
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FEMALE	0	0	0	0	0	0	7	8	
0 UG/KG	0	0	0	0	0	0	9	0	
								* TOTALS	

Parathyroid Gland	+	+							47
Pituitary Gland	+	+							52
Angiectasis								1 3.0	
Pars Distalis, Hyperplasia								10 2.0	
Thyroid Gland	+	+							51
Inflammation	1								1 1.0
C-cell, Hyperplasia								10 1.6	
Follicular Cell, Hypertrophy								6 1.5	

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+							52
Inflammation	1	2							41 1.6
Duct, Cyst	2	2							26 2.0
Ovary	+	+							52
Cyst								8 2.5	
Uterus	+	+							52
Inflammation								4 1.8	
Metaplasia, Squamous	3								29 1.9

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DAY ON TEST	0	0	5	7	1	0	2	1	
<hr/>									
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	7	8	
FEMALE	0	0	0	0	0	0	7	8	
0 UG/KG	0	0	0	0	0	0	9	0	
								* TOTALS	
Thrombosis								1	1.0
Endometrium, Hyperplasia, Cystic								28	1.6
Vagina								7	

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+			52		
Atrophy						4	2.5
Hyperplasia	2	2				31	3.0
Lymph Node, Mandibular	+	+			51		
Hyperplasia, Plasma Cell	2					24	2.0
Lymph Node, Mesenteric	+	+			52		
Atrophy						1	3.0
Hyperplasia, Plasma Cell						1	2.0
Spleen	+	+			52		
Hematopoietic Cell Proliferation		3				42	2.0
Hemorrhage						1	3.0
Necrosis						1	3.0
Pigmentation	3	1				39	1.8
Lymphoid Follicle, Atrophy	2					3	2.0
Thymus	+	+			51		
Atrophy	2	2				41	2.6

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<hr/>									
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	7	8	
FEMALE	0	0	0	0	0	0	7	8	
0 UG/KG	0	0	0	0	0	0	9	0	
								* TOTALS	

INTEGUMENTARY SYSTEM

Mammary Gland	+	+							52	
Cyst										1 2.0
Hyperplasia			2							4 2.0
<hr/>										
Skin	+	+								52

MUSCULOSKELETAL SYSTEM

Bone	+	+								52
------	---	---	--	--	--	--	--	--	--	----

NERVOUS SYSTEM

Brain	+	+								52
Gliosis										1 2.0
Hemorrhage			2							3 2.0
Hydrocephalus										1 2.0
Necrosis										2 3.0

RESPIRATORY SYSTEM

Lung	+	+								51
Inflammation										5 1.0
Metaplasia, Squamous										1 1.0

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DAY ON TEST	0	0	5	7	1	0	2	1
SPRAGUE-DAWLEY RATS								
FEMALE								
0 UG/KG								
ANIMAL ID	0	0	0	0	0	0	7	8
	9	0						
								* TOTALS

Proteinosis									1 1.0
Alveolar Epithelium, Hyperplasia									4 1.5
Alveolar Epithelium, Metaplasia, Bronchiolar									6 1.2
Alveolus, Infiltration Cellular, Histiocyte									36 1.8
.....									
Nose	+	+							52
Cyst									1 2.0
Inflammation									1 2.0
Olfactory Epithelium, Degeneration									1 2.0
Respiratory Epithelium, Degeneration, Focal									1 2.0
Respiratory Epithelium, Hyperplasia									5 1.2
.....									
Trachea	+	+							51

SPECIAL SENSES SYSTEM

.....									
Eye	+	+							52
Cornea, Inflammation									1 3.0
Retina, Atrophy									1 2.0
.....									
Harderian Gland	+	+							52
Infiltration Cellular, Mononuclear Cell									7 1.0

URINARY SYSTEM

.....									
-------	--	--	--	--	--	--	--	--	--

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DAY ON TEST		0	0	
		5	7	
		1	0	
		2	1	
.....				
SPRAGUE-DAWLEY RATS FEMALE		0	0	
		0	0	
		0	0	
	ANIMAL ID	7	8	
	0 UG/KG	9	0	
				* TOTALS
Kidney		+	+	52
Accumulation, Hyaline Droplet				1 2.0
Calculus Micro Observation Only				3
Mineralization		1		25 1.0
Nephropathy		1	1	42 1.5
Pigmentation				2 1.0
Artery, Inflammation, Chronic Active				1 2.0
.....				
Urinary Bladder		+	+	52

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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
SPRAGUE-DAWLEY RATS FEMALE 100 UG/KG	0	7	6	3	6	2	6	7	7	6	3	6	7	3	5	7	7	7	4	4	7	7	6	7	6	
	2	3	3	0	0	6	7	3	3	0	4	6	0	8	7	3	3	3	9	8	3	3	2	0	0	
	8	3	7	2	8	5	4	3	4	2	1	5	6	6	1	3	3	3	5	4	4	3	0	8	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	
	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	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	
	2	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	

females
(cont...)

Inflammation	2																							
Stomach, Glandular Erosion	+ +																							
Artery, Mineralization	1																							
Tooth Peridental Tissue, Inflammation	+ 2 + 2 + 2																							

CARDIOVASCULAR SYSTEM

Blood Vessel Aorta, Mineralization	+ +																							
Heart	+ +																							
Cardiomyopathy	1 1																							
Artery, Mineralization	1																							
Coronary Artery, Thrombosis																								
Endocardium, Hyperplasia																								
Endocardium, Infiltration Cellular	1																							
Epicardium, Inflammation																								
Myocardium, Mineralization	1																							

ENDOCRINE SYSTEM

Adrenal Cortex Degeneration, Cystic	+ +																							
	3 3 2 3 2																							

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	0 7 6 3 6 2 6 7 7 6 3 6 7 3 5 7 7 7 4 4 7 7 6 7 6																							
ANIMAL ID	2 3 3 0 0 6 7 3 3 0 4 6 0 8 7 3 3 3 9 8 3 3 2 0 0																							
	8 3 7 2 8 5 4 3 4 2 1 5 6 6 1 3 3 3 5 4 4 3 0 8 2																							
SPRAGUE-DAWLEY RATS FEMALE	0 0																							
100 UG/KG	3 3																							
	0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2																							
	2 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9																							
Hyperplasia	2 2 1 2 2 2 3 1 3 1 2 3 2 2 3 2 2																							
Hypertrophy	2 2 2 2 3 1 3 1 3 1 2 1 2 1 1 1 2 3																							
Necrosis	2 1 2 1																							
Vacuolization Cytoplasmic	1 1 1 2 1																							
Adrenal Medulla	+ +																							
Hyperplasia	2 1 1 2 1 4 2																							
Islets, Pancreatic	+ +																							
Hyperplasia																								
Parathyroid Gland	+ + + + + + + + + + + + + + M + + + + + + + + + +																							
Hyperplasia																								
Pituitary Gland	+ +																							
Angiectasis	1																							
Cyst																								
Pars Distalis, Hyperplasia	3 3 1 2																							
Thyroid Gland	+ +																							
C-cell, Hyperplasia	2 2 4 2 3 1 2 3 1 2																							
Follicular Cell, Hypertrophy	2 1 1 2																							

females (cont...)

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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	7	6	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	7	5
	2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	3	0
	8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	5	3
SPRAGUE-DAWLEY 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
100 UG/KG	0	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
	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	7
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3

females (cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Muscularis, Inflammation																	1	2							
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation																									
Parasite Metazoan						X												X							
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Basophilic Focus		X							X								X								
Basophilic Focus, Multiple			X																			X			
Cholangiofibrosis																									
Clear Cell Focus		X									X					X									
Clear Cell Focus, Multiple			X			X	X	X											X						
Eosinophilic Focus																	X								

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 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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

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	6	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	7	5
	2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	3	0
	8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	5	3
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
100 UG/KG	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
ANIMAL ID	3	3	3	3	3	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3
Eosinophilic Focus, Multiple		X												X											
Fatty Change, Focal		1																							
Fatty Change, Diffuse										2															
Hematopoietic Cell Proliferation			1	1			1			1		1		1						1					
Hepatodiaphragmatic Nodule										X															
Inflammation	1		1	1		1			1		1			1		1		1	1	1	1	1	1	1	
Mixed Cell Focus					X							X													X
Mixed Cell Focus, Multiple				X		X		X			X				X		X			X				X	
Necrosis										3									3						
Pigmentation	1											1													
Bile Duct, Cyst																									
Bile Duct, Fibrosis																									
Bile Duct, Hyperplasia						2							1		1										
Centrilobular, Degeneration																									
Hepatocyte, Hypertrophy	1														1				2						2
Hepatocyte, Multinucleated												1													
Oval Cell, Hyperplasia				1		1						1		1		1		1							
Mesentery																									
Pancreas																									
Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Acinus, Atrophy, Focal														1											
Acinus, Hyperplasia																									2
Artery, Inflammation, Chronic Active									2																
Salivary Glands																									
Hyperplasia, Squamous	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
						3	2																		

females (cont...)

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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	6	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	7	5
	2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	3	0
	8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	5	3
SPRAGUE-DAWLEY 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	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
100 UG/KG	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	7
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3

females (cont...)

Inflammation																											
Stomach, Glandular Erosion	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Artery, Mineralization																											
2																											
Tooth Peridental Tissue, Inflammation														+													+
2																											

CARDIOVASCULAR SYSTEM

Blood Vessel Aorta, Mineralization	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
Heart Cardiomyopathy	2																												
Artery, Mineralization														1	1	1													1
Coronary Artery, Thrombosis																													
Endocardium, Hyperplasia																													
Endocardium, Infiltration Cellular																													
Epicardium, Inflammation																													
Myocardium, Mineralization																													
3																													

ENDOCRINE SYSTEM

Adrenal Cortex Degeneration, Cystic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
2																										
1																										
1																										

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Lab: BAT

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	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	5	
	2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	0	
	8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	3	
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	
100 UG/KG	3	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	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	7	7	7	7	
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3

females (cont...)

Clitoral Gland Inflammation Duct, Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
			2	1	2		2	1	2			2	2	2	1	2	1	3		2	2	1	2	3	3
	2		2		2		2	2	1		2	3	2	3		3	3	2	1	2	2	3	1	2	3
Ovary Cyst	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
						2	2								2										
Uterus Inflammation Metaplasia, Squamous Endometrium, Hyperplasia, Cystic	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
			1																						
	2	2	1	2	2				2			3					1		1	2	2		1	1	
	2		3	3	2		1			1	1	4	3		1		1	1	1	1	1	1	1	1	

HEMATOPOIETIC SYSTEM

Bone Marrow Atrophy Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
			3	2	2				2	3		2	4		2		2		3			2		3
Lymph Node Mediastinal, Hemorrhage																								
Lymph Node, Mandibular Hyperplasia, Plasma Cell	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+
	2		2	3	2	2	2	2		2	1		2	1	2	1						2	2	2
Lymph Node, Mesenteric Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
															2									

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TDMS No. 20304 - 01
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

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	6	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	7	5
	2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	3	0
	8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	5	3
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
100 UG/KG	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
ANIMAL ID	3	3	3	3	3	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	7	7	7	7
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3

females
(cont...)

Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic Cell Proliferation		1	2	2	2	2	1	1		3	2	2		1	2	1		2		2	2	3	1	1	2
Pigmentation		3	1	1	3	1	2	1			2	1	3	1	1		2	1	1	1		2	1	1	
Lymphoid Follicle, Atrophy	3																			2					
Red Pulp, Atrophy	3																								
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+
Atrophy	4	2	4	2	2	3	4			4		3	2		3	2			3	2	2	3	3	3	
Cyst								3																	3
Hemorrhage																			3						
Inflammation																			2						

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst	3						3																		
Hyperplasia						1										1									
Inflammation, Chronic Active																									
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperkeratosis							2																		
Hyperplasia, Squamous							2	2																	
Inflammation							2	2	4																

MUSCULOSKELETAL SYSTEM

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

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TDMS No. 20304 - 01
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 Species/Strain: RATS/SD

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 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
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 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	Animals																								females (cont...)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
0	0	0	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	5	6	6	7	7	7	0	7	7	7	3	7	6	7	2	7	5	4	6	7	7	7	5	5	
2	5	7	5	7	3	3	3	5	2	3	3	5	3	9	3	9	3	7	8	7	3	3	3	0	0	
8	8	5	8	2	4	4	4	3	3	3	4	7	5	2	4	8	3	9	2	2	3	4	5	3	3	
.....																										
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
100 UG/KG	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
ANIMAL ID	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	7	7	7	7	7	
	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	5	8	6	7	8	9	0	1	2	3	

Skeletal Muscle +

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hydrocephalus																								
Vacuolization Cytoplasmic																								

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation																								
Alveolar Epithelium, Hyperplasia				1																			1	
Alveolar Epithelium, Metaplasia, Bronchiolar					2	2				2				1	1								1	
Alveolus, Infiltration Cellular, Histiocyte		2		2	2	1	1	2		3	2	2		2	2	2		2	2		2	2	2	
Serosa, Inflammation																	3							
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation																						1		
Olfactory Epithelium, Degeneration																								
Respiratory Epithelium, Hyperplasia															1									
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

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 Lab: BAT

DAY ON TEST	0	0	5	7	7	3	1	3	
<hr/>									
SPRAGUE-DAWLEY RATS	0	0	0	0	3	3	7	7	
FEMALE	0	0	3	3	7	7	4	5	
100 UG/KG								* TOTALS	

ALIMENTARY SYSTEM

Esophagus	+	+						52	
Muscularis, Inflammation			2						3 1.7
Intestine Large, Cecum	+	+						51	
Intestine Large, Colon	+	+						52	
Intestine Large, Rectum	+	+						52	
Inflammation									1 2.0
Parasite Metazoan									2
Intestine Small, Duodenum	+	+						52	
Intestine Small, Ileum	+	+						51	
Intestine Small, Jejunum	+	+						52	
Liver	+	+						51	
Angiectasis									1 3.0
Basophilic Focus									5
Basophilic Focus, Multiple									2
Cholangiofibrosis									2 1.0
Clear Cell Focus									3
Clear Cell Focus, Multiple									7
Eosinophilic Focus									5

* .. 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

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BLANK .. Not examined microscopically

Page 42

1-4 .. Lesion qualified as:

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DAY ON TEST		0	0	
		5	7	
		7	3	
		1	3	
.....				
SPRAGUE-DAWLEY RATS		0	0	
FEMALE		0	0	
	ANIMAL ID	3	3	
		7	7	
100 UG/KG		4	5	
				* TOTALS
Eosinophilic Focus, Multiple				3
Fatty Change, Focal				1 1.0
Fatty Change, Diffuse	1			2 1.5
Hematopoietic Cell Proliferation				20 1.0
Hepatodiaphragmatic Nodule				1
Inflammation	1	1		30 1.0
Mixed Cell Focus				5
Mixed Cell Focus, Multiple				14
Necrosis				2 3.0
Pigmentation				5 1.2
Bile Duct, Cyst				3 2.3
Bile Duct, Fibrosis				1 2.0
Bile Duct, Hyperplasia				6 1.2
Centrilobular, Degeneration				2 1.5
Hepatocyte, Hypertrophy	2			12 1.3
Hepatocyte, Multinucleated				1 1.0
Oval Cell, Hyperplasia				12 1.1
.....				
Mesentery				1
.....				
Pancreas		+	+	52
Inflammation, Chronic Active				1 2.0
Acinus, Atrophy, Focal				2 1.5
Acinus, Hyperplasia				2 2.0
Artery, Inflammation, Chronic Active				2 2.0
.....				
Salivary Glands		+	+	51
.....				
Stomach, Forestomach		+	+	52
Hyperplasia, Squamous				3 2.7

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 x .. Lesion present
 I .. Insufficient tissue

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

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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	5	7	7	3	1	3	
<hr/>									
SPRAGUE-DAWLEY RATS	0	0	0	0	3	3	7	7	
FEMALE	0	0	3	3	7	7	4	5	
100 UG/KG								* TOTALS	

Inflammation									1 2.0
<hr/>									
Stomach, Glandular	+	+							52
Erosion									1 2.0
Artery, Mineralization									1 1.0
<hr/>									
Tooth									5
Peridental Tissue, Inflammation									5 2.2

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+							52
Aorta, Mineralization									1 1.0
<hr/>									
Heart	+	+							52
Cardiomyopathy				1					19 1.2
Artery, Mineralization									1 1.0
Coronary Artery, Thrombosis									1 2.0
Endocardium, Hyperplasia									1 2.0
Endocardium, Infiltration Cellular									1 1.0
Epicardium, Inflammation									1 3.0
Myocardium, Mineralization									1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+							52
Degeneration, Cystic									8 2.1

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

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 CAS Number: 31508-00-6

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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0		
	5	7		
	7	3		
	1	3		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	3	3		
ANIMAL ID	7	7		
100 UG/KG	4	5		
				* TOTALS
Hyperplasia	2			18 2.2
Hypertrophy	2			37 1.8
Necrosis				1 2.0
Vacuolization Cytoplasmic				12 1.4
<hr/>				
Adrenal Medulla	+	+		52
Hyperplasia				12 1.8
<hr/>				
Islets, Pancreatic	+	+		52
Hyperplasia				1 3.0
<hr/>				
Parathyroid Gland	+	M		46
Hyperplasia				1 3.0
<hr/>				
Pituitary Gland	+	+		52
Angiectasis				1 1.0
Cyst				1 2.0
Pars Distalis, Hyperplasia				6 2.2
<hr/>				
Thyroid Gland	+	+		51
C-cell, Hyperplasia				14 2.0
Follicular Cell, Hypertrophy				7 1.9

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	5	7	7	3	1	3	
SPRAGUE-DAWLEY RATS									
FEMALE									
100 UG/KG									
ANIMAL ID	0	0	0	0	3	3	7	7	
	4	5							* TOTALS

Clitoral Gland	+	+							52
Inflammation	1	2							38 1.8
Duct, Cyst	2	2							39 2.0
Ovary	+	+							52
Cyst	1	2							10 2.0
Uterus	+	+							52
Inflammation									6 2.0
Metaplasia, Squamous	2								26 1.7
Endometrium, Hyperplasia, Cystic		1							27 1.7

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+							52
Atrophy									1 2.0
Hyperplasia	3	2							30 2.8
Lymph Node	+								2
Mediastinal, Hemorrhage	2								1 2.0
Lymph Node, Mandibular	+	+							51
Hyperplasia, Plasma Cell		2							34 1.8
Lymph Node, Mesenteric	+	+							51
Atrophy									1 2.0

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Page 46

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 20304 - 01
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 Species/Strain: RATS/SD

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 Lab: BAT

DAY ON TEST		0	0		
		5	7		
		7	3		
		1	3		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
		3	3		
ANIMAL ID		7	7		
100 UG/KG		4	5		
				* TOTALS	
Spleen		+	+	52	
Hematopoietic Cell Proliferation		3	2		39 2.0
Pigmentation		1	3		35 1.7
Lymphoid Follicle, Atrophy					4 2.5
Red Pulp, Atrophy					2 3.0
.....					
Thymus		+	+	51	
Atrophy		4	2		38 2.7
Cyst					2 3.0
Hemorrhage					1 3.0
Inflammation					1 2.0
.....					
INTEGUMENTARY SYSTEM					
.....					
Mammary Gland		+	+	51	
Cyst					2 3.0
Hyperplasia			2		5 1.6
Inflammation, Chronic Active		3			1 3.0
.....					
Skin		+	+	51	
Hyperkeratosis					1 2.0
Hyperplasia, Squamous					2 2.0
Inflammation					3 2.7
.....					
MUSCULOSKELETAL SYSTEM					
.....					
Bone		+	+	52	
.....					

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 Lab: BAT

DAY ON TEST	0	0	5	7	7	3	3
SPRAGUE-DAWLEY RATS							
FEMALE							
100 UG/KG							
ANIMAL ID	0	0	0	0	3	3	7
	4	5					
							* TOTALS

Skeletal Muscle 1

NERVOUS SYSTEM

Brain + + 52
 Hydrocephalus 2 1.5
 Vacuolization Cytoplasmic 1 3.0

RESPIRATORY SYSTEM

Lung + + 52
 Inflammation 3 1.7
 Alveolar Epithelium, Hyperplasia 2 1.0
 Alveolar Epithelium, Metaplasia, Bronchiolar 7 1.4
 Alveolus, Infiltration Cellular, Histiocyte 1 2 35 1.7
 Serosa, Inflammation 1 3.0

Nose + + 52
 Inflammation 5 2.0
 Olfactory Epithelium, Degeneration 1 3.0
 Respiratory Epithelium, Hyperplasia 5 1.4

Trachea + + 52

SPECIAL SENSES SYSTEM

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DAY ON TEST		0	0		
		5	7		
		7	3		
		1	3		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
100 UG/KG		3	3		
ANIMAL ID		7	7		
		4	5		
				* TOTALS	
Eye		+	+	52	
Cornea, Inflammation					1 1.0
Harderian Gland		+	+	52	
Hyperplasia					1 1.0
Infiltration Cellular, Mononuclear Cell					10 1.0
URINARY SYSTEM					
Kidney		+	+	52	
Cyst					2 2.5
Mineralization		1			28 1.1
Nephropathy		1	2		40 1.6
Pigmentation					3 1.0
Pelvis, Dilatation					1 2.0
Pelvis, Inflammation					1 1.0
Urinary Bladder		+	+	52	
Hyperplasia					1 2.0
Inflammation					1 2.0

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Page 49

1-4 .. Lesion qualified as:

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2) Mild 4) Marked

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First Dose M/F: NA / 03/26/04

Lab: BAT

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	5	7	3	7	7	7	1	7	1	1	7	6	7	4	6	7	7	6	4	5	5	4	4	7
	9	7	3	9	3	0	3	8	3	6	9	3	8	3	1	5	3	3	5	3	4	8	6	5	3
	4	5	3	3	3	7	5	3	3	3	7	3	7	5	2	8	4	3	2	3	5	9	9	3	5
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
220 UG/KG	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
ANIMAL ID	0	0	0	0	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	6	7	8	9	0	1	2	3	4	5	8	1	2	3	4	5	6	7	8	9	0	1	2	3	4

females
(cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum Inflammation Ulcer	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum Parasite Metazoan	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	+	+	+	+	X
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Basophilic Focus			X											X					X						X
Basophilic Focus, Multiple																									
Cholangiofibrosis																							2		
Clear Cell Focus	X								X					X				X							
Clear Cell Focus, Multiple																									
Degeneration, Cystic																									

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TEF evaluation (PCB 118)
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 Lab: BAT

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	5	7	3	7	7	7	1	7	1	1	7	6	7	4	6	7	7	6	4	5	5	4	4	7
	9	7	3	9	3	0	3	8	3	6	9	3	8	3	1	5	3	3	5	3	4	8	6	5	3
	4	5	3	3	3	7	5	3	3	3	7	3	7	5	2	8	4	3	2	3	5	9	9	3	5
SPRAGUE-DAWLEY 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	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
220 UG/KG	0	0	0	0	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	6	7	8	9	0	1	2	3	4	5	8	1	2	3	4	5	6	7	8	9	0	1	2	3	4
Atrophy	3	4	4	2	3	4	2	2	2			2	3	2	2	3	4	2	4	2	3			3	
Cyst																									2
Hemorrhage																									

females (cont...)

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																			1						
Inflammation, Granulomatous							3													3					
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst Epithelial Inclusion																									

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Hydrocephalus																									
Spinal Cord																									+

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 Lab: BAT

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	5	7	3	7	7	7	1	7	1	1	7	6	7	4	6	7	7	6	4	5	5	4	4	7
	9	7	3	9	3	0	3	8	3	6	9	3	8	3	1	5	3	3	5	3	4	8	6	5	3
	4	5	3	3	3	7	5	3	3	3	7	3	7	5	2	8	4	3	2	3	5	9	9	3	5
SPRAGUE-DAWLEY 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	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
220 UG/KG	0	0	0	0	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	4	4	4	4	4
	6	7	8	9	0	1	2	3	4	5	8	1	2	3	4	5	6	7	8	9	0	1	2	3	4

females (cont...)

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation	1											1													
Pigmentation																									
Alveolar Epithelium, Metaplasia, Bronchiolar						1							1	1			2							2	
Alveolus, Infiltration Cellular, Histiocyte	2		2	1	1	2	2				2	1		2	2	2	1		2	1	1			1	2
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation							2				2											1	2		
Respiratory Epithelium, Hyperplasia							2	1			2	1											1		
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cornea, Inflammation																								
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia																								2
Infiltration Cellular, Mononuclear Cell																	1							

URINARY SYSTEM

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 Lab: BAT

DAY ON TEST	0	0	
	7	7	
	3	3	
	5	3	
.....			
SPRAGUE-DAWLEY RATS	0	0	
FEMALE	0	0	
	4	4	
ANIMAL ID	7	8	
220 UG/KG	9	0	
			* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	52	
Intestine Large, Cecum	+	+	51	
Inflammation				1 2.0
Ulcer				1 2.0
Intestine Large, Colon	+	+	52	
Intestine Large, Rectum	+	+	52	
Parasite Metazoan				3
Intestine Small, Duodenum	+	+	52	
Intestine Small, Ileum	+	+	50	
Intestine Small, Jejunum	+	+	50	
Liver	+	+	52	
Angiectasis				1 2.0
Basophilic Focus				8
Basophilic Focus, Multiple				3
Cholangiofibrosis				2 1.5
Clear Cell Focus				4
Clear Cell Focus, Multiple				3
Degeneration, Cystic				1 1.0

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 Lab: BAT

DAY ON TEST	0	0		
	7	7		
	3	3		
	5	3		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	4	4		
ANIMAL ID	7	8		
220 UG/KG	9	0		
				* TOTALS
Eosinophilic Focus				4
Eosinophilic Focus, Multiple				5
Fatty Change, Focal				6 1.0
Fatty Change, Diffuse				1 1.0
Hematopoietic Cell Proliferation				21 1.0
Hepatodiaphragmatic Nodule	X			2
Inflammation	1	1		35 1.1
Mixed Cell Focus		X		7
Mixed Cell Focus, Multiple	X			22
Necrosis				1 1.0
Pigmentation		1		12 1.3
Toxic Hepatopathy				3 1.0
Bile Duct, Cyst				5 2.8
Bile Duct, Hyperplasia				7 1.3
Centrilobular, Degeneration				4 1.3
Hepatocyte, Hypertrophy				15 1.6
Hepatocyte, Multinucleated				3 1.0
Oval Cell, Hyperplasia				9 1.2
<hr/>				
Mesentery				3
<hr/>				
Oral Mucosa				1
<hr/>				
Pancreas	+	+		52
Inflammation, Chronic Active				2 1.0
Acinus, Atrophy, Focal				3 1.3
Artery, Inflammation, Chronic Active				1 2.0
<hr/>				
Salivary Glands	+	+		52
<hr/>				

* .. 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 67

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0		
	7	7		
	3	3		
	5	3		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	4	4		
ANIMAL ID	7	8		
220 UG/KG	9	0		
				* TOTALS
Stomach, Forestomach	+	+		52
Stomach, Glandular Glands, Cyst	+	+		52
				1 1.0
Tooth	+			5
Peridental Tissue, Inflammation	3			5 2.6

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+		52
Heart	+	+		52
Cardiomyopathy		1		14 1.1
Artery, Mineralization				1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+		52
Degeneration, Cystic		2		9 2.1
Hyperplasia				13 2.3
Hypertrophy	3	1		39 1.8
Inflammation				1 2.0
Necrosis				2 3.0
Vacuolization Cytoplasmic	2			13 1.5
Adrenal Medulla	+	+		52

* .. 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 68

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		7	7		
		3	3		
		5	3		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
220 UG/KG		4	4		
ANIMAL ID		7	8		
		9	0		
				* TOTALS	
Hyperplasia		3		14	1.4
Islets, Pancreatic	+ +			52	
Parathyroid Gland	+ +			47	
Pituitary Gland	+ +			52	
Pars Distalis, Hyperplasia				13	2.1
Thyroid Gland	+ +			51	
C-cell, Hyperplasia				10	1.8
Follicular Cell, Hypertrophy				13	1.6

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+ +			51	
Hyperplasia, Squamous				1	3.0
Inflammation	2 2			39	1.7
Duct, Cyst	1 2			31	1.9
Ovary	+ +			52	
Cyst	2 2			13	2.3
Bilateral, Cyst				1	4.0

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 69

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		7	7		
		3	3		
		5	3		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
		4	4		
ANIMAL ID		7	8		
220 UG/KG		9	0		
				* TOTALS	
Uterus		+	+	52	
Cyst					1 3.0
Inflammation					6 2.3
Metaplasia, Squamous		1			27 2.0
Endometrium, Hyperplasia, Cystic		3	1		22 1.5

HEMATOPOIETIC SYSTEM

Bone Marrow		+	+	52	
Atrophy					1 2.0
Hyperplasia			2		30 3.1
Myelofibrosis					1 1.0
Lymph Node				1	
Lymph Node, Mandibular		+	+	52	
Hyperplasia, Lymphoid					1 2.0
Hyperplasia, Plasma Cell		1	2		36 1.6
Lymph Node, Mesenteric		+	+	52	
Spleen		+	+	52	
Hematopoietic Cell Proliferation		2			39 1.9
Pigmentation		2			31 1.6
Lymphoid Follicle, Atrophy					2 1.5
Red Pulp, Atrophy					2 1.5
Thymus		+	+	51	

* .. 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 70

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		7	7		
		3	3		
		5	3		
.....					
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
		4	4		
ANIMAL ID		7	8		
220 UG/KG		9	0		
				* TOTALS	

Atrophy	4	2			44	2.6
Cyst					1	2.0
Hemorrhage					1	3.0

INTEGUMENTARY SYSTEM

Mammary Gland	+	+			52	
Hyperplasia					4	1.3
Inflammation, Granulomatous					2	3.0
.....						
Skin	+	+			52	
Cyst Epithelial Inclusion						1

MUSCULOSKELETAL SYSTEM

Bone	+	+			52	
------	---	---	--	--	-----------	--

NERVOUS SYSTEM

Brain	+	+			52	
Angiectasis					1	1.0
Hydrocephalus					1	1.0
.....						
Spinal Cord						1

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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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	7	7	3	3	5	3	
<hr/>									
SPRAGUE-DAWLEY RATS	0	0	0	0	4	4	7	8	
FEMALE	0	0	4	4	7	8	9	0	
220 UG/KG								* TOTALS	

RESPIRATORY SYSTEM

Lung	+	+			52		
Inflammation					5	1.4	
Pigmentation					1	1.0	
Alveolar Epithelium, Metaplasia, Bronchiolar					14	1.3	
Alveolus, Infiltration Cellular, Histiocyte		1			37	1.6	
<hr/>							
Nose	+	+			52		
Inflammation					5	1.8	
Respiratory Epithelium, Hyperplasia					7	1.4	
<hr/>							
Trachea	+	+			52		

SPECIAL SENSES SYSTEM

Eye	+	+			52		
Cornea, Inflammation					1	3.0	
<hr/>							
Harderian Gland	+	+			52		
Hyperplasia					2	2.0	
Infiltration Cellular, Mononuclear Cell		2			3	1.3	

URINARY SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 72

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0	
		7	7	
		3	3	
		5	3	
.....				
SPRAGUE-DAWLEY RATS		0	0	
		0	0	
		4	4	
		7	8	
		9	0	
FEMALE	ANIMAL ID			
220 UG/KG				* TOTALS
Kidney		+	+	52
Accumulation, Hyaline Droplet				1 1.0
Mineralization		1		30 1.1
Necrosis				1 3.0
Nephropathy		1	2	46 1.3
Pigmentation				3 1.3
.....				
Urinary Bladder		+	+	52

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 73

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0
	7	6
	3	2
	4	7
.....		
SPRAGUE-DAWLEY RATS	0	0
FEMALE	0	0
	5	5
ANIMAL ID	7	8
460 UG/KG	9	0
		* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	52	
Ulcer				1 2.0
Muscularis, Inflammation				1 3.0
.....				
Intestine Large, Cecum	+	+	52	
Inflammation		3		1 3.0
Artery, Inflammation, Chronic Active				1 3.0
.....				
Intestine Large, Colon	+	+	52	
Artery, Inflammation, Chronic Active				1 3.0
.....				
Intestine Large, Rectum	+	+	52	
Parasite Metazoan				2
Artery, Inflammation, Chronic Active				2 2.5
.....				
Intestine Small, Duodenum	+	+	52	
.....				
Intestine Small, Ileum	+	+	52	
.....				
Intestine Small, Jejunum	+	+	52	
.....				
Liver	+	+	52	
Angiectasis				2 2.5
Basophilic Focus	X			4
Basophilic Focus, Multiple				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

Page 90

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0	
		7	6	
		3	2	
		4	7	
.....				
SPRAGUE-DAWLEY RATS		0	0	
FEMALE		0	0	
	ANIMAL ID	5	5	
		7	8	
460 UG/KG		9	0	
				* TOTALS
Cholangiofibrosis				3 1.7
Clear Cell Focus				5
Clear Cell Focus, Multiple				9
Eosinophilic Focus				4
Eosinophilic Focus, Multiple				11
Fatty Change, Focal				4 1.0
Fatty Change, Diffuse				9 1.7
Hematopoietic Cell Proliferation				1
Hepatodiaphragmatic Nodule				28 1.0
Inflammation				1
Mixed Cell Focus				36 1.1
Mixed Cell Focus, Multiple				6
Necrosis				30
Pigmentation				2 2.5
Toxic Hepatopathy				1 2
Bile Duct, Cyst				41 1.4
Bile Duct, Fibrosis				14 1.0
Bile Duct, Hyperplasia				6 2.3
Centrilobular, Degeneration				3 1.0
Hepatocyte, Hypertrophy				3 1.0
Hepatocyte, Multinucleated				8 1.4
Oval Cell, Hyperplasia				3 1.0
				20 1.6
				21 1.2
				29 1.2
.....				
Mesentery				3
Hemorrhage				1 3.0
Artery, Inflammation, Chronic Active				2 3.0
.....				
Oral Mucosa				1
Gingival, Hyperplasia, Squamous				1 3.0
.....				

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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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	7	6	3	2	4	7
SPRAGUE-DAWLEY RATS								
FEMALE								
460 UG/KG								
ANIMAL ID	0	0	0	0	5	5	7	8
	9	0						
								* TOTALS

Pancreas	+	+							52		
Inflammation, Chronic Active										2	1.0
Acinus, Atrophy, Focal										4	1.3
Artery, Inflammation, Chronic Active										7	2.4
Salivary Glands	+	+								51	
Stomach, Forestomach	+	+								52	
Stomach, Glandular	+	+								52	
Erosion											1 1.0
Tooth										5	
Peridental Tissue, Inflammation											5 2.0

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+								52	
Heart	+	+								52	
Cardiomyopathy											16 1.2
Artery, Mineralization											1 1.0

ENDOCRINE SYSTEM

Adrenal Cortex	+	+								51	
Angiectasis											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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

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 CAS Number: 31508-00-6

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 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		7	6		
		3	2		
		4	7		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
460 UG/KG		5	5		
ANIMAL ID		7	8		
		9	0		
				* TOTALS	
Atrophy				2	2.0
Degeneration, Cystic				12	2.4
Hyperplasia				16	2.4
Hypertrophy		1		43	1.7
Vacuolization Cytoplasmic				12	1.6
Adrenal Medulla		+	+	52	
Hyperplasia			1		16 1.8
Islets, Pancreatic		+	+	52	
Parathyroid Gland		+	+	50	
Pituitary Gland		+	+	52	
Pars Distalis, Hyperplasia					13 1.9
Thyroid Gland		+	+	51	
C-cell, Hyperplasia					6 2.3
Follicular Cell, Hypertrophy		1	3		18 1.4

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

Clitoral Gland	+	+		52	
Inflammation	1	1			40 1.5

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 93

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
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 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		7	6		
		3	2		
		4	7		
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
ANIMAL ID		5	5		
		7	8		
460 UG/KG		9	0		
				* TOTALS	
Duct, Cyst		2	1	35	2.2
Ovary		+	+	52	
Cyst			3	14	2.2
Fibrosis			3	1	3.0
Inflammation				2	3.5
Pigmentation			3	1	3.0
Uterus		+	+	52	
Adenomyosis				1	2.0
Cyst				1	3.0
Inflammation			3	8	2.3
Metaplasia, Squamous		2	3	34	1.8
Thrombosis				2	2.5
Artery, Inflammation, Chronic Active				1	3.0
Endometrium, Hyperplasia, Cystic		2		23	2.0
Vagina				1	

HEMATOPOIETIC SYSTEM

Bone Marrow		+	+	52	
Hyperplasia			4	32	2.7
Lymph Node				1	
Lymph Node, Mandibular		+	+	51	
Hyperplasia, Lymphoid				1	2.0

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 94

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST				
	0	0		
	7	6		
	3	2		
	4	7		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	5	5		
ANIMAL ID	7	8		
460 UG/KG	9	0		
				* TOTALS
Hyperplasia, Plasma Cell	3	2		33 1.7
Lymph Node, Mesenteric	+	+		52
Spleen	+	+		52
Hematopoietic Cell Proliferation				39 1.7
Necrosis				1 2.0
Pigmentation	1	1		36 1.5
Capsule, Hemorrhage				1 3.0
Lymphoid Follicle, Atrophy				2 2.0
Red Pulp, Atrophy				1 2.0
Thymus	+	+		50
Atrophy	2	4		44 2.8

INTEGUMENTARY SYSTEM

Mammary Gland	+	+		52
Cyst				2 3.0
Hyperplasia		1		5 1.4
Inflammation, Granulomatous				1 3.0
Skin	+	+		52
Cyst Epithelial Inclusion				1

MUSCULOSKELETAL SYSTEM

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 95

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	7	6	3	2	4	7	
SPRAGUE-DAWLEY RATS									
FEMALE									
460 UG/KG									
ANIMAL ID	0	0	0	0	5	5	7	8	
	9	0							* TOTALS
Bone	+	+							52

NERVOUS SYSTEM

Brain	+	+							52
Gliosis								1 3.0	
Hemorrhage								1 2.0	
Meninges, Inflammation								1 2.0	

RESPIRATORY SYSTEM

Lung	+	+							52
Hemorrhage								1 2.0	
Inflammation								3 1.0	
Metaplasia, Squamous								1 1.0	
Alveolar Epithelium, Metaplasia, Bronchiolar	2								18 1.4
Alveolus, Infiltration Cellular, Histiocyte	2	2							39 1.6
Nose	+	+							52
Inflammation								3 1.7	
Respiratory Epithelium, Hyperplasia								7 1.3	
Respiratory Epithelium, Necrosis								1 2.0	
Trachea	+	+							52

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

Page 96

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST				
	0	0		
	7	6		
	3	2		
	4	7		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	5	5		
ANIMAL ID	7	8		
460 UG/KG	9	0		
				* TOTALS
<hr/>				
Eye	+	+		52
Cornea, Inflammation				1 3.0
<hr/>				
Harderian Gland	+	+		52
Infiltration Cellular, Mononuclear Cell				10 1.0
<hr/>				
URINARY SYSTEM				
<hr/>				
Kidney	+	+		52
Calculus Micro Observation Only				2
Dilatation				1 3.0
Mineralization				18 1.1
Nephropathy	2	3		44 1.6
Pigmentation				4 1.3
Pelvis, Dilatation		3		1 3.0
Renal Tubule, Hyperplasia				1 2.0
<hr/>				
Urinary Bladder	+	+		52
<hr/>				

* .. 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 97

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
TEF evaluation (PCB 118)
CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
Time Report Requested: 12:05:16
First Dose M/F: NA / 03/26/04
Lab: BAT

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
SPRAGUE-DAWLEY 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
1000 UG/KG	0	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	2	2	2	3	3	3	3	4	4	4	4	4	4	4
Alveolus, Infiltration Cellular, Histiocyte	2	2	1	1	1	2	2			1	1	2	2	1	1			2	1						
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation	1				2														2						
Respiratory Epithelium, Hyperplasia	2				1			1		1		1	1						1		1				
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SPECIAL SENSES SYSTEM																									
Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retina, Atrophy																									
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell																									
Vacuolization Cytoplasmic												2													
URINARY SYSTEM																									
Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Calculus Micro Observation Only																									
Inflammation																									
Mineralization	1				1	1		1			1	1	1				1		1		1	1			
Nephropathy	1	2		2	3	1	2	2	3	2		1	1	2	1		2	2	1	3	1		1	1	2
Pigmentation	1												1						1						
Artery, Inflammation, Chronic Active																			2						
Capsule, Inflammation, Chronic Active													2												

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CAS Number: 31508-00-6

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Time Report Requested: 12:05:16
First Dose M/F: NA / 03/26/04
Lab: BAT

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
	4	6	6	7	7	5	7	5	7	7	0	7	6	7	7	7	7	5	7	7	7	6	7	6	4	
	8	5	0	3	2	1	3	6	3	3	6	3	8	3	3	3	3	3	3	3	3	7	1	6	0	
	7	2	2	4	5	6	3	1	5	5	4	5	0	3	5	4	5	1	3	3	5	4	8	9	7	
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	
1000 UG/KG	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	
ANIMAL ID	0	0	0	0	0	0	0	0	0	1	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	
	1	2	3	4	5	6	7	8	9	0	0	6	7	8	9	0	6	7	8	9	0	1	2	3	4	
Pelvis, Dilatation									2																	
Pelvis, Inflammation	1												2													
Transitional Epithelium, Hyperplasia									3				1													
Ureter																							+			
Urinary Bladder Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
											3															

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

SPRAGUE-DAWLEY 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	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	6
ANIMAL ID	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	
1000 UG/KG	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3	

females
(cont...)

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Muscularis, Degeneration									2																	
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Degeneration, Fatty									3																	
Artery, Inflammation, Chronic Active									3																	
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parasite Metazoan																						X				
Artery, Inflammation, Chronic Active									3													3				
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Parasite Metazoan													X													
Artery, Inflammation, Chronic Active									3													3				
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation																										
Ulcer																										
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Artery, Inflammation, Chronic Active																										
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																										
Artery, Inflammation, Chronic Active																										

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TDMS No. 20304 - 01
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 Route: GAVAGE
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

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First Dose M/F: NA / 03/26/04

Lab: BAT

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	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3
SPRAGUE-DAWLEY 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
1000 UG/KG	0	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
	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7
	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Basophilic Focus																					X	X			
Basophilic Focus, Multiple																							X		
Cholangiofibrosis																									
Clear Cell Focus									X																
Clear Cell Focus, Multiple																									
Degeneration, Cystic											1														
Eosinophilic Focus									X				X	X											X
Eosinophilic Focus, Multiple	X		X									X		X					X				X		
Fatty Change, Focal																									
Fatty Change, Diffuse	2	2	2	2	1	1	3		2	3	2	1		1	1			3	2		3	2	2	2	3
Hematopoietic Cell Proliferation	1				1					1		1	1					1	1				1		
Hyperplasia, Nodular			X		X				X				X				X						X		
Inflammation	1	1	1	1	2	1	1	1		2	1	1	2	1	2	1	1	1	1		1	2	1	1	2
Mixed Cell Focus															X										
Mixed Cell Focus, Multiple	X		X	X	X		X	X	X	X	X	X		X						X	X	X	X	X	X
Necrosis	1	1					1		1	2		1	2					1		1		1		1	1
Pigmentation	2		3	2	3	3	1	2	1	3	1	2	2	2	3	3	2	1	2	1	2	3	2	3	1
Toxic Hepatopathy	1		3	1	1	2	1		1	1	1	2		1	2	1		1			1	1	2		2
Bile Duct, Cyst															2		2								
Bile Duct, Fibrosis										1					1										
Bile Duct, Hyperplasia				1	1	1	2	1			2	1		2				2					1	2	1
Centrilobular, Degeneration						2								2						1					
Hepatocyte, Hypertrophy	2	2	2	1	1		1		3	2	2	1		2	3	3	2	2			1	1	3		2
Hepatocyte, Multinucleated	1		2	2	1	2	1		1	1		1	1		1	2	2		1	1	1	1	1	1	
Oval Cell, Hyperplasia	1		2	2	2	3	1	1		2		2	1	1	2	2	1	2		1	1	2	1	1	1
Mesentery					+			+												+					
Artery, Inflammation, Chronic Active									3												3				
Fat, Necrosis																									

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
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 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
	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
1000 UG/KG	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7
ANIMAL ID	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females (cont...)

Oral Mucosa																										
Gingival, Hyperplasia, Squamous																										
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active				1																						
Acinus, Atrophy, Focal				2																						
Acinus, Hyperplasia																					2					
Acinus, Vacuolization Cytoplasmic												1													1	
Artery, Inflammation, Chronic Active								3				2			2						2					
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Degeneration								2																		
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Squamous								1										2								
Artery, Inflammation, Chronic Active								2																		
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mineralization			1																							
Tooth																										
Peridontal Tissue, Inflammation											3												3			

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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TDMS No. 20304 - 01

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DAY ON TEST	0 0																								females (cont...)
	7 2 7 7 7 6 7 7 6 6 5 7 4 7 7 7 4 7 7 5 7 7 5 7 7																								
3 9 3 3 3 4 3 3 0 7 8 3 8 3 3 3 8 3 3 5 3 3 9 3 3																									
3 8 4 5 4 2 3 3 2 8 6 5 4 5 4 5 0 3 4 1 3 4 3 4 3																									
SPRAGUE-DAWLEY RATS	0 0																								
FEMALE	0 0																								
1000 UG/KG	6 6																								
ANIMAL ID	4 4 5 5 5 5 5 5 6 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3																								
Cardiomyopathy	2 1																								1 1
Inflammation	2																								
Artery, Inflammation, Chronic Active																									2
Endocardium, Hyperplasia																									1

ENDOCRINE SYSTEM

Adrenal Cortex	+ +																								
Atrophy	3 3																								2 2 3
Degeneration, Cystic																									3 2
Hematopoietic Cell Proliferation																									
Hyperplasia	2 1 1 2 2																								3 1 2 2 1 2 2
Hypertrophy																									
Necrosis	3																								2
Vacuolization Cytoplasmic	1																								1 2 1 2 1
Adrenal Medulla	+ +																								
Hyperplasia	1 1																								1 1 1 2
Necrosis	3																								
Islets, Pancreatic	+ +																								
Parathyroid Gland	+ +																								
Pituitary Gland	+ +																								
Angiectasis																									3
Pars Distalis, Cyst																									
Pars Distalis, Hyperplasia	2 2																								3 2 3 1 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	0
	7	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3

SPRAGUE-DAWLEY 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	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
ANIMAL ID	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7
1000 UG/KG	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females (cont...)

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Infiltration Cellular, Lymphocyte																									
C-cell, Hyperplasia				3					1										X					X	
Follicular Cell, Hyperplasia																									
Follicular Cell, Hypertrophy	2	2	3		2					1			2		2	2	3				3			1 1	

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation		1	1	1	2		1	1	1			1	1	1	1	1	1	1		1	1		1	
Duct, Cyst	2		3	3	3	2	2	2	2		2	2	2	2	2	3	3	3	3				3	2 3
Ovary	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cyst						3						2		3		2	2						2	3 3
Inflammation						3																		
Uterus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage																								
Inflammation	2		2																				2	
Metaplasia, Squamous	4	1	4	3	2	3		2		2		1	4		1	2	4			1	1	1		
Thrombosis																								
Ulcer			2																					
Cervix, Cyst				2																				
Endometrium, Hyperplasia, Cystic		1			2	2								1	3					1		1	3	2

* .. 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 111

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3
SPRAGUE-DAWLEY 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	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
ANIMAL ID	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7
1000 UG/KG	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

females
(cont...)

Epithelium, Hyperplasia

Vagina

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																									
Hyperplasia	3	2	2		2	3			2			3	4		3	3	2	2	2			3			
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																									
Hyperplasia, Lymphoid													2												
Hyperplasia, Plasma Cell				1	2	2	1	1		2	2	3	1	1	1	3		2	1		3				3
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy																								3	
Hemorrhage																									
Spleen	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hematopoietic Cell Proliferation	1		1	1		1		1	2	1		2	3	1	2	2		2	1		1		3		1
Pigmentation	2	2	2	1	3	2	3	2	1	2	3	2	1	2				1	2	2	2	3	1	2	2
Lymphoid Follicle, Atrophy																									
Red Pulp, Atrophy																									
Thymus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy	3		3	3	2	4	2	3	4	4	3	4	2	3	3	2	3	4	4		3	3	4	3	4
Hemorrhage																									2

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 + .. Tissue examined microscopically
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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
 Page 112

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3
SPRAGUE-DAWLEY 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	0	0
1000 UG/KG	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
ANIMAL ID	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7
	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3
	females (cont...)																								

INTEGUMENTARY SYSTEM

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

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Congestion																				3				
Inflammation						4																		2
Metaplasia, Squamous Alveolar Epithelium, Metaplasia, Bronchiolar	2				1				1	2	1	2		1	1	2		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

TDMS No. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
TEF evaluation (PCB 118)
CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
Time Report Requested: 12:05:16
First Dose M/F: NA / 03/26/04
Lab: BAT

DAY ON TEST	0 7 3 3	0 2 9 8	0 7 3 4	0 7 3 5	0 7 3 4	0 6 4 2	0 7 3 3	0 7 3 3	0 6 0 2	0 6 7 8	0 5 8 6	0 7 3 5	0 4 8 4	0 7 3 5	0 7 3 4	0 4 8 5	0 7 3 3	0 5 5 1	0 7 3 7	0 7 5 8	0 7 3 9	0 5 3 4	0 7 3 3	0 7 3 4	0 7 3 3	
SPRAGUE-DAWLEY 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
1000 UG/KG	0	0	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
	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7
	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3

**females
(cont...)**

Alveolus, Infiltration Cellular, Histiocyte	2	1	1	2	2	1	2	2	2	2	2	2	2	2	2	1	1	2	2	1	2				
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation		2															1								
Respiratory Epithelium, Hyperplasia				1	1									1		1			1		1				
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retina, Atrophy			2																						
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell	1								1		1						1								
Vacuolization Cytoplasmic																									

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Calculus Micro Observation Only										X															
Inflammation					2																				
Mineralization	1	1			1	1				1			1	1			1		1			1	1		
Nephropathy		1	3	2	2	2	3	1	1	1		3	1	1		1	1	2	2		3	2	1	1	2
Pigmentation			1																		1	1			
Artery, Inflammation, Chronic Active																									
Capsule, Inflammation, Chronic Active																									

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M .. Missing tissue
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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	2	7	7	7	6	7	7	6	6	5	7	4	7	7	7	4	7	7	5	7	7	5	7	7	7
	3	9	3	3	3	4	3	3	0	7	8	3	8	3	3	3	8	3	3	5	3	3	9	3	3	3
	3	8	4	5	4	2	3	3	2	8	6	5	4	5	4	5	0	3	4	1	3	4	3	4	3	3
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
1000 UG/KG	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
ANIMAL ID	4	4	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7
	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3
Pelvis, Dilatation																										
Pelvis, Inflammation																										
Transitional Epithelium, Hyperplasia								1																		
Ureter																										
Urinary Bladder Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

females
(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
 Page 115

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	4	5	2	3	1	0
<hr/>								
SPRAGUE-DAWLEY RATS	0	0						
FEMALE	0	0						
ANIMAL ID	6	6						
1000 UG/KG	7	7						
	4	5						
								* TOTALS

ALIMENTARY SYSTEM

Esophagus	+	+	52	1	2.0
Muscularis, Degeneration					
Intestine Large, Cecum	+	+	52	1	3.0
Degeneration, Fatty				3	2.3
Artery, Inflammation, Chronic Active					
Intestine Large, Colon	+	+	52	1	2.7
Parasite Metazoan				3	
Artery, Inflammation, Chronic Active					
Intestine Large, Rectum	+	+	52	1	2.8
Parasite Metazoan				5	
Artery, Inflammation, Chronic Active					
Intestine Small, Duodenum	+	+	52	1	3.0
Inflammation				1	3.0
Ulcer					
Intestine Small, Ileum	+	+	52	1	2.0
Artery, Inflammation, Chronic Active					
Intestine Small, Jejunum	+	+	52	1	3.0
Inflammation, Chronic Active	3			1	2.0
Artery, Inflammation, Chronic Active					

* .. 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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		4	5		
		2	3		
		1	0		
<hr/>					
SPRAGUE-DAWLEY RATS		0	0		
FEMALE		0	0		
	ANIMAL ID	6	6		
		7	7		
1000 UG/KG		4	5		
<hr/>					
					* TOTALS
Liver		+	+		52
Basophilic Focus			X		8
Basophilic Focus, Multiple					1
Cholangiofibrosis					2 1.5
Clear Cell Focus					2
Clear Cell Focus, Multiple					3
Degeneration, Cystic					1 1.0
Eosinophilic Focus					5
Eosinophilic Focus, Multiple		X			20
Fatty Change, Focal			3		3 1.7
Fatty Change, Diffuse					39 2.0
Hematopoietic Cell Proliferation					19 1.1
Hyperplasia, Nodular					12
Inflammation		1	2		43 1.3
Mixed Cell Focus					1
Mixed Cell Focus, Multiple					30
Necrosis			3		20 1.5
Pigmentation		1	3		50 2.2
Toxic Hepatopathy			1		33 1.4
Bile Duct, Cyst					6 2.2
Bile Duct, Fibrosis					2 1.0
Bile Duct, Hyperplasia					21 1.5
Centrilobular, Degeneration					6 1.7
Hepatocyte, Hypertrophy		1	2		44 2.0
Hepatocyte, Multinucleated		1	2		40 1.3
Oval Cell, Hyperplasia					40 1.6
<hr/>					
Mesentery					9
Artery, Inflammation, Chronic Active					5 3.4
Fat, Necrosis					1 3.0
<hr/>					

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

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 117

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	4	5	2	3	1	0
SPRAGUE-DAWLEY RATS								
FEMALE								
1000 UG/KG								
ANIMAL ID	0	0	0	0	6	6	7	7
	4	5						
								* TOTALS
Oral Mucosa								1
Gingival, Hyperplasia, Squamous								1 3.0
Pancreas	+	+						52
Inflammation, Chronic Active								3 1.0
Acinus, Atrophy, Focal								3 2.0
Acinus, Hyperplasia								1 2.0
Acinus, Vacuolization Cytoplasmic								4 1.0
Artery, Inflammation, Chronic Active								7 2.4
Salivary Glands	+	+						52
Degeneration								1 2.0
Stomach, Forestomach	+	+						52
Hyperplasia, Squamous								2 1.5
Artery, Inflammation, Chronic Active								1 2.0
Stomach, Glandular	+	+						52
Mineralization								1 1.0
Tooth								4
Peridental Tissue, Inflammation								4 2.5

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+						52
Heart	+	+						52

* .. 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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0		
		4	5		
		2	3		
		1	0		
.....					
SPRAGUE-DAWLEY RATS FEMALE		0	0		
		0	0		
		6	6		
	ANIMAL ID	7	7		
	1000 UG/KG	4	5		
				* TOTALS	
Cardiomyopathy		1		19	1.2
Inflammation				1	2.0
Artery, Inflammation, Chronic Active				1	2.0
Endocardium, Hyperplasia				1	1.0

ENDOCRINE SYSTEM

Adrenal Cortex		+	+		52	
Atrophy					9	2.3
Degeneration, Cystic					6	2.3
Hematopoietic Cell Proliferation					1	1.0
Hyperplasia					13	2.0
Hypertrophy		1			44	1.6
Necrosis					3	2.7
Vacuolization Cytoplasmic					12	1.4
.....						
Adrenal Medulla		+	+		52	
Hyperplasia					10	1.4
Necrosis					1	3.0
.....						
Islets, Pancreatic		+	+		52	
.....						
Parathyroid Gland		+	+		50	
.....						
Pituitary Gland		+	+		52	
Angiectasis					1	3.0
Pars Distalis, Cyst			2		1	2.0
Pars Distalis, Hyperplasia					16	2.5

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+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
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 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	4	5	2	3	1	0
<hr/>								
SPRAGUE-DAWLEY RATS	0	0	0	0	6	6	7	7
FEMALE	0	0	0	0	6	6	7	7
1000 UG/KG	4	5						
								* TOTALS

Thyroid Gland	+	+						52	
Infiltration Cellular, Lymphocyte									1 2.0
C-cell, Hyperplasia	1								12 2.0
Follicular Cell, Hyperplasia									1 3.0
Follicular Cell, Hypertrophy									21 1.8

GENERAL BODY SYSTEM
 NONE

GENITAL SYSTEM

Clitoral Gland	+	+						51	
Inflammation	1	1							35 1.2
Duct, Cyst	2	1							37 2.2
Ovary	+	+						52	
Cyst	2								14 2.4
Inflammation									1 3.0
Uterus	+	+						52	
Hemorrhage									1 2.0
Inflammation									8 2.1
Metaplasia, Squamous	4								35 2.3
Thrombosis									1 3.0
Ulcer									2 2.0
Cervix, Cyst									1 2.0
Endometrium, Hyperplasia, Cystic									13 1.6

* .. 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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST	0	0	4	5	2	3	1	0
SPRAGUE-DAWLEY RATS								
FEMALE								
1000 UG/KG								
ANIMAL ID	0	0	0	0	6	6	7	7
	4	5						
								* TOTALS

Epithelium, Hyperplasia 1 2.0

Vagina 1

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+			52		
Atrophy				2		1	2.0
Hyperplasia	3					34	2.6
Lymph Node, Mandibular	+	+			52		
Atrophy						1	3.0
Hyperplasia, Lymphoid						1	2.0
Hyperplasia, Plasma Cell						30	1.9
Lymph Node, Mesenteric	+	+			52		
Atrophy						1	3.0
Hemorrhage						1	3.0
Spleen	+	+			52		
Hematopoietic Cell Proliferation						32	1.7
Pigmentation				3		40	2.0
Lymphoid Follicle, Atrophy				2		3	2.7
Red Pulp, Atrophy						1	2.0
Thymus	+	+			50		
Atrophy	2	3				46	3.0
Hemorrhage						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

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 Lab: BAT

DAY ON TEST	0	0	4	5	2	3	1	0
<hr/>								
SPRAGUE-DAWLEY RATS	0	0						
FEMALE	0	0						
1000 UG/KG	6	6						
ANIMAL ID	7	7						
	4	5						
								* TOTALS

INTEGUMENTARY SYSTEM

Mammary Gland	+	+	52
Skin	+	+	52

MUSCULOSKELETAL SYSTEM

Bone	+	+	52
Skeletal Muscle			1

NERVOUS SYSTEM

Brain	+	+	52
-------	---	---	----

RESPIRATORY SYSTEM

Lung	+	+	52	
Congestion				1 3.0
Inflammation				2 3.0
Metaplasia, Squamous				1 1.0
Alveolar Epithelium, Metaplasia, Bronchiolar				24 1.4

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Page 122

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST				
	0	0		
	4	5		
	2	3		
	1	0		
<hr/>				
SPRAGUE-DAWLEY RATS	0	0		
FEMALE	0	0		
	6	6		
ANIMAL ID	7	7		
1000 UG/KG	4	5		
				* TOTALS
<hr/>				
Alveolus, Infiltration Cellular, Histiocyte				34 1.6
<hr/>				
Nose	+	+		52
Inflammation				5 1.6
Respiratory Epithelium, Hyperplasia				14 1.1
<hr/>				
Trachea	+	+		52
<hr/>				
SPECIAL SENSES SYSTEM				
<hr/>				
Eye	+	+		52
Retina, Atrophy				1 2.0
<hr/>				
Harderian Gland	+	+		52
Infiltration Cellular, Mononuclear Cell				4 1.0
Vacuolization Cytoplasmic				1 2.0
<hr/>				
URINARY SYSTEM				
<hr/>				
Kidney	+	+		52
Calculus Micro Observation Only				1
Inflammation				1 2.0
Mineralization				22 1.0
Nephropathy	1	2		44 1.7
Pigmentation				6 1.0
Artery, Inflammation, Chronic Active				1 2.0
Capsule, Inflammation, Chronic Active				1 2.0

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 + .. Tissue examined microscopically
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 I .. Insufficient tissue
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 Lab: BAT

DAY ON TEST			
	0	0	
	4	5	
	2	3	
	1	0	
.....			
SPRAGUE-DAWLEY RATS	0	0	
FEMALE	0	0	
	6	6	
ANIMAL ID	7	7	
1000 UG/KG	4	5	
			* TOTALS
Pelvis, Dilatation			1 2.0
Pelvis, Inflammation			2 1.5
Transitional Epithelium, Hyperplasia			3 1.7
.....			
Ureter			1
.....			
Urinary Bladder			52
Inflammation	+	+	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

Page 124

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 20304 - 01
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 Species/Strain: RATS/SD

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 Lab: BAT

DAY ON TEST	0 0																								0
	6 7 4 7 6 7 4 7 7 7 6 7 6 7 1 7 6 7 7 7 5 7 7 7 7																								
SPRAGUE-DAWLEY RATS FEMALE 4600 UG/KG	9 3 8 3 7 3 3 3 3 3 7 1 7 3 5 2 2 3 3 1 6 3 3 3 3																								3
	7 4 4 3 2 3 3 3 4 5 3 8 2 5 8 7 3 4 5 1 7 5 4 3 4																								
ANIMAL ID	0 0																								females (cont...)
	0 0																								
	7 7																								
	0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 2 2 2 3																								
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 1 2 3 4 5 6 7 8 9 0																								

ALIMENTARY SYSTEM

Esophagus	+ +																									
Intestine Large, Cecum Artery, Inflammation, Chronic Active	M + + + M +																								3	
Intestine Large, Colon Parasite Metazoan Artery, Inflammation, Chronic Active	+ + + + M +																									
Intestine Large, Rectum Parasite Metazoan Artery, Inflammation, Chronic Active	+ +																								X 3	
Intestine Small, Duodenum	M +																									
Intestine Small, Ileum	M + + + M +																									
Intestine Small, Jejunum	+ + + + M +																									
Liver Angiectasis Basophilic Focus Cholangiofibrosis Degeneration, Cystic Eosinophilic Focus, Multiple	+ +																								3 3 3 2 3 3 2 2 3 2 2 3	X X

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

DAY ON TEST	0 0																								females (cont...)	
	6	7	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7		7
SPRAGUE-DAWLEY RATS FEMALE	0 0																								females (cont...)	
	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
4600 UG/KG	1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 1 2 3 4 5 6 7 8 9 0																								females (cont...)	
ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	1	2	3	4	5	1	2	3	4	5	6	7	8		9
Fatty Change, Diffuse	2	2	3	3	2	2	2	3	3	3	3	2	3	3	3	2	2	3	3	2	3	3	2	2	2	
Hematopoietic Cell Proliferation		1	1		1	1	1					1					1		2	1	1		1	1	1	
Hyperplasia, Nodular	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Inflammation	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	2	1	1	1	
Mixed Cell Focus																										
Mixed Cell Focus, Multiple									X		X													X	X	
Necrosis	2	1	1	2		1	2	1	1		2	2		3						3				2	2	
Pigmentation	2	1	1	2	2	2	2	2	1	1	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	
Toxic Hepatopathy	3	4	2	4	3	4	3	4	4	2	2	4	3	4	1	4	3	4	4	3	2	4	3	4	4	
Bile Duct, Cyst				2	2	2		3		2						2						2	1	2	2	
Bile Duct, Hyperplasia	3	2		1	3	2		2	3	1			2	2		1	2	1	3	2	1	2	2	1	2	
Centrilobular, Degeneration											3															
Hepatocyte, Hypertrophy	4	4	3	3	3	3	3	3	4	3	3	4	3	3	2	4	4	3	4	4	4	3	3	3	4	
Hepatocyte, Multinucleated		1	1	2	3	2	3	2		1	1	1	3	1	1	2	2	2	1	2	3	2	2	2	2	
Oval Cell, Hyperplasia	3	4	2	3	3	3	1	3	4	3	3	3	3	3		3	3	3	3	3	3	3	4	3	3	
Mesentery									+					+			+		+					+		
Artery, Inflammation, Chronic Active									3					4			2		3					3		
Artery, Thrombosis																	3									
Fat, Necrosis																										
Oral Mucosa																										
Gingival, Cyst																										
Pancreas	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation, Chronic Active																3										
Acinus, Atrophy, Focal																										
Acinus, Atrophy, Diffuse																										
Acinus, Vacuolization Cytoplasmic		1	2	2		2	2	3	3	1	3	3	2	2		3	2	2	2	3	1	2	2	2	2	
Artery, Inflammation, Chronic Active						3		2		2									2		2				2	

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Page 126

TDMS No. 20304 - 01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

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
ANIMAL ID	6	7	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7	7	7
	9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3	3	
	7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	3	4	
SPRAGUE-DAWLEY 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	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	
4600 UG/KG	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	1	2	3	4	5	6	7	8	9	0	

females
(cont...)

Duct, Dilatation
Duct, Inflammation
Duct, Necrosis

Salivary Glands

Stomach, Forestomach
Hyperplasia, Squamous
Inflammation
Artery, Inflammation, Chronic Active

Stomach, Glandular
Artery, Inflammation, Chronic Active

Tooth
Peridontal Tissue, Inflammation

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	1	2	2	2	2	
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
													+	+	+	+									+	
																										1

CARDIOVASCULAR SYSTEM

Blood Vessel

Heart
Cardiomyopathy
Inflammation
Artery, Inflammation, Chronic Active
Coronary Artery, Thrombosis
Endocardium, Hyperplasia
Epicardium, Fibrosis

+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
		1		1				1	1	1			1			1	1								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
	6	7	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7
	9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3
	7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	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
	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	1	1	1	1	1	2	2	2	2	2	2	2	3
SPRAGUE-DAWLEY RATS																							females (cont...)	
FEMALE																								
4600 UG/KG																								

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy	2	3		3		3	2	3	3	2		2			2		2	3		2	2	3	3	
Degeneration, Cystic												1	3						3					
Hyperplasia			2						2				3		3	2	3							
Hypertrophy	2	4	3	3		1	2	1	1				3		2			2		3	2	1	1	2
Vacuolization Cytoplasmic	2			2		3		2	1				2	2		1	1	1		2	1	2		
Adrenal Medulla	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia																								
Islets, Pancreatic	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland	M	+	+	+	+	+	+	+	+	+	+	+	+	M	M	+	+	+	+	+	+	+	+	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pars Distalis, Hyperplasia				2		2			2			2		2		2	2			2				
Thyroid Gland	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Infiltration Cellular, Lymphocyte																								
C-cell, Hyperplasia				3		1	2								3					2		4	2	
Follicular Cell, Hypertrophy			2	2		2	2		1	2	1	2					2				1	2	2	

GENERAL BODY SYSTEM

NONE

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+ .. Tissue examined microscopically

x .. Lesion present

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Lab: BAT

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	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7
	9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3
	7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	3
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
4600 UG/KG	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	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	1	2	3	4	5	6	7	8	9

females (cont...)

GENITAL SYSTEM

Clitoral Gland Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Duct, Cyst		1	1		1	1		1		1		1	1	2			2	2		1		2	2	
Ovary Cyst Inflammation	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
				3		1			3									2			2		3	
Uterus Adenomyosis Cyst Hemorrhage Inflammation Metaplasia, Squamous Endometrium, Hyperplasia, Cystic	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
				3																			4	
				3														4		2			2	
			1	2					1										1					
			1	2									2						4				2	

HEMATOPOIETIC SYSTEM

Bone Marrow Hyperplasia Necrosis	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	4	3	4	3	3	3	4	3	3	2		3	4	3	2	3	2	3	3	3	4	3		2
										3														3
Lymph Node Bronchial, Ectasia																								+
																								2

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Lab: BAT

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

SPRAGUE-DAWLEY RATS
 FEMALE

4600 UG/KG

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

females
(cont...)

Bronchial, Hemorrhage																											1
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Lymphoid Hyperplasia, Plasma Cell	2	2		2					2			3	1			2	2			2	2						
Lymph Node, Mesenteric Ectasia	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	2
Spleen	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hematopoietic Cell Proliferation		1	1	1		1	3	2	2	1		2	2	2		2	2	2	2	2	2	1		1	2		
Pigmentation			1	2				1	1					2	2	3			2	1			2	2	2		
Lymphoid Follicle, Atrophy																2											
Red Pulp, Atrophy																2											
Thymus	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Atrophy	4	3	2	3	3	2	3		2	4		4	4	4		4	3	4	4	3	3	2	4	3	3		
Hemorrhage																											
Artery, Inflammation, Chronic Active																											3

INTEGUMENTARY SYSTEM

Mammary Gland Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Skin	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	7	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7	7	
	9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3	3	
	7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	3	4	
SPRAGUE-DAWLEY 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	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	
4600 UG/KG	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	
ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	1	2	3	4	5	6	7	8	9	0	

females (cont...)

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +

Spinal Cord
Nerve, Degeneration

RESPIRATORY SYSTEM

Lung +

Hemorrhage 2

Inflammation 1

Metaplasia, Squamous 1 2 2 3 3 2 2

Pigmentation 1

Alveolar Epithelium, Metaplasia, Bronchiolar 2 2 2 2 2 3 1 2 2 2 1 2 3 2 3 3 3 3 2

Alveolus, Infiltration Cellular, Histiocyte 1 1 2 1 1 2 1 1 2 1 1 2 3 2 2 1 2 2 2 1 1

Artery, Mediastinum, Inflammation, Chronic Active

Nose +

Inflammation 3 1 3 2 1 2 3 2 1 2 3 2 1 1 2

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7	
	9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3	
	7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	3	
.....																									
SPRAGUE-DAWLEY RATS FEMALE 4600 UG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	
ANIMAL ID	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	1	2	3	4	5	6	7	8	9	0
.....																									
Nasolacrimal Duct, Inflammation, Suppurative																									
Olfactory Epithelium, Degeneration		2																							
Olfactory Epithelium, Metaplasia									2																
Respiratory Epithelium, Hyperplasia		2		1		1				1	1						1		2	1		1		2	1
.....																									
Trachea Inflammation	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
																									1

females (cont...)

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Retina, Atrophy							2					2		2					2					
.....																								
Harderian Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Mononuclear Cell										1				1		1			1					1

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Cyst														3												
Mineralization					1			1	1	1				1	1	1			1			1	1			
Nephropathy	2	3	2	2	2	2	1	3	3	2	3	3	2	2	1	3	2	3	2	1	2	3	1	2	3	
Pigmentation	3	1		3	2	3		3	3	2	2	2	2	2		3	2	2	2	1	1	3	2	3	2	
Pelvis, Inflammation																									1	
Transitional Epithelium, Hyperplasia																									2	3

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TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

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	4	7	6	7	4	7	7	7	6	7	6	7	1	7	6	7	7	7	5	7	7	7
		9	3	8	3	7	3	3	3	3	3	7	1	7	3	5	2	2	3	3	1	6	3	3	3
		7	4	4	3	2	3	3	3	4	5	3	8	2	5	8	7	3	4	5	1	7	5	4	3
SPRAGUE-DAWLEY RATS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FEMALE		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	
4600 UG/KG		0	0	0	0	0	0	0	0	0	1	1	1	1	1	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	1	2	3	4	5	6	7		
Urinary Bladder		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		

**females
(cont...)**

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 CAS Number: 31508-00-6

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 Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
0	0	0	0	0	0	0	0	0	0	0	0	0	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	6	7	7	6	6	7	0	0	7	0	7	6	7	6	6	7	6	7	7	7	7	7	7	4	7															
6	5	9	3	3	7	2	3	5	7	3	7	3	5	3	4	8	3	1	3	3	3	3	1	8	3																
5	9	2	3	3	7	0	4	4	1	4	5	3	2	3	2	7	5	7	3	4	5	1	4	4																	
SPRAGUE-DAWLEY RATS																																									
FEMALE																																									
4600 UG/KG																																									
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					
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7			
3	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8	9	0	6	7	8	9	0	6	7	8	9	0	6	7	8		
Fatty Change, Diffuse	3	2	3	3	3	3	2	2	2	2	3	3	3	3	1	2	3	2	3	2	3	2	2	2	2	2															
Hematopoietic Cell Proliferation			1	1	1				1		1		1			1	1	1																							
Hyperplasia, Nodular			X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Inflammation	2	2	1	1	2	2			2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1																
Mixed Cell Focus												X																													
Mixed Cell Focus, Multiple									X												X																				
Necrosis	1	2							1	1	1					2	2							3																	
Pigmentation		2	2	1	1	2	1	1	1	1	2	1	1	2	1	2	1	1	1	1	1	1	3	3	2																
Toxic Hepatopathy		2	4	4	4	4	4	4		4	3	3	3	4	4	3	3	4	3	4	3	4	2	3																	
Bile Duct, Cyst			2		2				3	3	3	2			2	1	2	2																							
Bile Duct, Hyperplasia		2	1		1	1			1		2	2	2	2	2	1	3	2	3	1	2	2	2	2																	
Centrilobular, Degeneration																																									
Hepatocyte, Hypertrophy		3	3	4	4	4	4	4	2	3	4	4	4	4	4	4	4	3	4	3	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Hepatocyte, Multinucleated		1	1	1	1		1	2	2		1		1		2	1	2	1	2	2	2	2	2	3	1																
Oval Cell, Hyperplasia		3	3	3	3	4	3	3		3	3	3	3	2	3	3	3	3	3	2	3	2	3	2	3																
Mesentery		+				+									+																										
Artery, Inflammation, Chronic Active						3									3																										
Artery, Thrombosis																																									
Fat, Necrosis		3																																							
Oral Mucosa						+		+																																	
Gingival, Cyst						3																																			
Pancreas		+	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Inflammation, Chronic Active		1																																							
Acinus, Atrophy, Focal																	1																								
Acinus, Atrophy, Diffuse		3																																							
Acinus, Vacuolization Cytoplasmic			2	3	3	2	3	1		2	3	1	2		2	2	3	2	2	2	2	2	2	3																	
Artery, Inflammation, Chronic Active										1	1					3	3	1																							

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 Page 135

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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	4	6	7	7	6	6	7	0	0	7	0	7	6	7	6	6	7	6	7	7	7	7	4	7
	6	5	9	3	3	7	2	3	5	7	3	7	3	5	3	4	8	3	1	3	3	3	1	8	3
	5	9	2	3	3	7	0	4	4	1	4	5	3	2	3	2	7	5	7	3	4	5	1	4	4
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
4600 UG/KG	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
ANIMAL ID	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	7
	5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8

females
(cont...)

Duct, Dilatation											4													
Duct, Inflammation											3													
Duct, Necrosis																								
Salivary Glands	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia, Squamous											2													
Inflammation																								
Artery, Inflammation, Chronic Active																								
Stomach, Glandular	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Artery, Inflammation, Chronic Active											2													
Tooth																								
Peridontal Tissue, Inflammation											1													

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heart	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	M	+	+	+	+	+	+	+	+
Cardiomyopathy																								
Inflammation											1													
Artery, Inflammation, Chronic Active																								
Coronary Artery, Thrombosis																								
Endocardium, Hyperplasia											2													
Epicardium, Fibrosis											3													

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Lab: BAT

	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	0	4	6	7	7	6	6	7	0	0	7	0	7	6	7	6	6	7	6	7	7	7	7	4	7																						
	6	5	9	3	3	7	2	3	5	7	3	7	3	5	3	4	8	3	1	3	3	3	1	8	3																						
	5	9	2	3	3	7	0	4	4	1	4	5	3	2	3	2	7	5	7	3	4	5	1	4	4																						
.....																																															
SPRAGUE-DAWLEY 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																					
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																					
4600 UG/KG	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																					
	3	4	4	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7																					
	5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8																						
																								7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8
																								females (cont...)																							

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Atrophy			2	3	2	2	2				3		3	3	3			3	2	2	3	2	2			2
Degeneration, Cystic					3								3													
Hyperplasia					2													3								
Hypertrophy			2		1	1	2	1	1		1		1			1	1		2	2	2			3		
Vacuolization Cytoplasmic							2		1										2							3
.....																										
Adrenal Medulla	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hyperplasia							1																			
.....																										
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	M	+	+	+	+	+	+	+	+	+
.....																										
Parathyroid Gland	M	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
.....																										
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Pars Distalis, Hyperplasia																		3								1
.....																										
Thyroid Gland	M	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Infiltration Cellular, Lymphocyte																										3
C-cell, Hyperplasia							2					4		1												
Follicular Cell, Hypertrophy				1	3					3		3				2	2	2	3			2	1	3		

GENERAL BODY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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

**SPRAGUE-DAWLEY RATS
 FEMALE**

4600 UG/KG

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

**females
 (cont...)**

GENITAL SYSTEM

Clitoral Gland Inflammation	+	+	M	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	
Duct, Cyst			2		2	2	2			1		1		2	1			1			2	2		2	2
Ovary Cyst	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	
Inflammation					2																				
Uterus Adenomyosis	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	+	+	+	+	+	+	
Cyst																									
Hemorrhage																								2	
Inflammation																									
Metaplasia, Squamous															2										
Endometrium, Hyperplasia, Cystic								3						2										1	

HEMATOPOIETIC SYSTEM

Bone Marrow Hyperplasia	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Necrosis	3	2	3	3	3	3	3	4			3	3		3	2	3	2	3	3	3	3	2	3	3
Lymph Node Bronchial, Ectasia																								

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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. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

DAY ON TEST	0 0																								
	0 4 6 7 7 6 6 7 0 0 7 0 7 6 7 6 6 7 6 7 7 7 7 4 7																								
ANIMAL ID	6 5 9 3 3 7 2 3 5 7 3 7 3 5 3 4 8 3 1 3 3 3 1 8 3																								
	5 9 2 3 3 7 0 4 4 1 4 5 3 2 3 2 7 5 7 3 4 5 1 4 4																								
SPRAGUE-DAWLEY RATS FEMALE 4600 UG/KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	
	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	6	7	7	7	
	5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8

females (cont...)

Bronchial, Hemorrhage

Lymph Node, Mandibular Atrophy
Hyperplasia, Lymphoid
Hyperplasia, Plasma Cell

M	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
				1	2			1				3		1			1	1		1			2	2

Lymph Node, Mesenteric Ectasia

+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Spleen
Hematopoietic Cell Proliferation
Pigmentation
Lymphoid Follicle, Atrophy
Red Pulp, Atrophy

+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	M	+	+	+	+	+	+	+	+
		2	2	1		1		3			1	M		1	1			2	2	2	1	1	2	2
1	2	1		2	1	2		1					1	1		3		1	2		2	1	2	
						2																		2

Thymus
Atrophy
Hemorrhage
Artery, Inflammation, Chronic Active

+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	M	+	+	+	+	+	+	+	+
		4	2	3	4	3	4	4			3		4	2	4		4	2	4	3	3	3	4	4
2									2			2												3

INTEGUMENTARY SYSTEM

Mammary Gland
Hyperplasia

+	+	+	+	+	+	+	+	+	+	M	+	I	+	+	+	+	+	+	+	+	+	+	+	+
																								2

Skin

+	+	+	+	+	+	+	+	+	+	M	+	+	+	+	+	+	+	+	+	+	+	+	+	+
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

DAY ON TEST	0 0																								
	0 4 6 7 7 6 6 7 0 0 7 0 7 6 7 6 7 6 7 7 7 7 4 7																								
ANIMAL ID	6 5 9 3 3 7 2 3 5 7 3 7 3 5 3 4 8 3 1 3 3 3 1 8 3																								
	5 9 2 3 3 7 0 4 4 1 4 5 3 2 3 2 7 5 7 3 4 5 1 4 4																								
SPRAGUE-DAWLEY RATS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	
4600 UG/KG	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	
	5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8
	females (cont...)																								

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +

Spinal Cord +
 Nerve, Degeneration 3

RESPIRATORY SYSTEM

Lung + + + + + + + + M + + + + + M + + + + + + + +

Hemorrhage
 Inflammation
 Metaplasia, Squamous 1 1 3 2 3
 Pigmentation
 Alveolar Epithelium, Metaplasia, Bronchiolar 1 2 2 2 1 1 3 1 1 2 2 1 3 1 2 2 3 1 3
 Alveolus, Infiltration Cellular, Histiocyte 1 2 2 1 1 2 1 1 2 2 1 2 1 1 2 2 1 2
 Artery, Mediastinum, Inflammation, Chronic Active 2

Nose
 Inflammation +
 2 1 2 1 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 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 140

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPRAGUE-DAWLEY RATS FEMALE 4600 UG/KG	0	4	6	7	7	6	6	7	0	0	7	0	7	6	7	6	6	7	6	7	7	7	7	4	7
	6	5	9	3	3	7	2	3	5	7	3	7	3	5	3	4	8	3	1	3	3	3	1	8	3
	5	9	2	3	3	7	0	4	4	1	4	5	3	2	3	2	7	5	7	3	4	5	1	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	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
	3	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	6	6	6	6	6	7	7	7	7
	5	1	2	3	4	5	6	7	8	9	0	3	6	7	8	9	0	6	7	8	9	0	6	7	8

females
(cont...)

Nasolacrimal Duct, Inflammation,
Suppurative
Olfactory Epithelium, Degeneration
Olfactory Epithelium, Metaplasia
Respiratory Epithelium, Hyperplasia

3

1 1 1 2 2 2 1 2 1 2 1 2 1 1 1 1

Trachea
Inflammation

+ +

SPECIAL SENSES SYSTEM

Eye
Retina, Atrophy

+ + + + + + + + + + + + + + + + + 2 + + + + + + +

Harderian Gland
Infiltration Cellular, Mononuclear Cell

+ 1 + +

URINARY SYSTEM

Kidney
Cyst
Mineralization
Nephropathy
Pigmentation
Pelvis, Inflammation
Transitional Epithelium, Hyperplasia

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

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

3 2 2 2 3 2 2 3 2 2 3 2 3 2 2 3 2 2 3 2 2 3 2 3 2

2 2 2 2 3 2 2 2 2 1 2 2 3 2 2 2 2 3 3 3

2 2

* .. 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 141
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
 2) Mild 4) Marked

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

| 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 | 4 | 6 | 7 | 7 | 6 | 6 | 7 | 0 | 0 | 7 | 0 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 |
| | | 6 | 5 | 9 | 3 | 3 | 7 | 2 | 3 | 5 | 7 | 3 | 7 | 3 | 5 | 3 | 4 | 8 | 3 | 1 | 3 | 3 | 3 | 1 | 8 | 3 |
| | | 5 | 9 | 2 | 3 | 3 | 7 | 0 | 4 | 4 | 1 | 4 | 5 | 3 | 2 | 3 | 2 | 7 | 5 | 7 | 3 | 4 | 5 | 1 | 4 | 4 |
| SPRAGUE-DAWLEY RATS | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 4600 UG/KG | | 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 |
| ANIMAL ID | | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 |
| | | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 3 | 6 | 7 | 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 6 | 7 | 8 |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + |

females (cont...)

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 + .. Tissue examined microscopically
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 CAS Number: 31508-00-6

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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| DAY ON TEST | 0 | 0 | 6 | 7 | 9 | 3 | 9 | 3 | |
|----------------------------|---|---|---|---|---|---|---|-----------------|--|
| <hr/> | | | | | | | | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 7 | 7 | 7 | 8 | |
| FEMALE | 0 | 0 | 7 | 7 | 7 | 8 | 9 | 0 | |
| 4600 UG/KG | | | | | | | | * TOTALS | |

ALIMENTARY SYSTEM

| | | | | | | | | | |
|--------------------------------------|---|---|---|--|--|--|--|--|---------------|
| Esophagus | + | + | | | | | | | 52 |
| Intestine Large, Cecum | + | + | | | | | | | 48 |
| Artery, Inflammation, Chronic Active | | | | | | | | | 1 3.0 |
| Intestine Large, Colon | + | + | | | | | | | 48 |
| Parasite Metazoan | | | | | | | | | 1 |
| Artery, Inflammation, Chronic Active | | | | | | | | | 1 2.0 |
| Intestine Large, Rectum | + | + | | | | | | | 50 |
| Parasite Metazoan | | | | | | | | | 3 |
| Artery, Inflammation, Chronic Active | | | | | | | | | 1 3.0 |
| Intestine Small, Duodenum | + | + | | | | | | | 48 |
| Intestine Small, Ileum | + | + | | | | | | | 47 |
| Intestine Small, Jejunum | + | + | | | | | | | 48 |
| Liver | + | + | | | | | | | 49 |
| Angiectasis | | | | | | | | | 2 2.0 |
| Basophilic Focus | | | | | | | | | 1 |
| Cholangiofibrosis | | | 4 | | | | | | 22 2.5 |
| Degeneration, Cystic | | | | | | | | | 2 1.0 |
| Eosinophilic Focus, Multiple | X | X | | | | | | | 41 |

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

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x .. Lesion present

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

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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| DAY ON TEST | 0 | 0 | | |
|--------------------------------------|---|---|--|-----------------|
| | 6 | 7 | | |
| | 9 | 3 | | |
| | 9 | 3 | | |
| <hr/> | | | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | | |
| FEMALE | 0 | 0 | | |
| | 7 | 7 | | |
| ANIMAL ID | 7 | 8 | | |
| 4600 UG/KG | 9 | 0 | | |
| | | | | * TOTALS |
| Fatty Change, Diffuse | 3 | 3 | | 48 2.5 |
| Hematopoietic Cell Proliferation | | | | 21 1.0 |
| Hyperplasia, Nodular | X | X | | 43 |
| Inflammation | 1 | 1 | | 44 1.3 |
| Mixed Cell Focus | | | | 1 |
| Mixed Cell Focus, Multiple | | | | 6 |
| Necrosis | | 1 | | 22 1.7 |
| Pigmentation | 2 | 2 | | 48 1.7 |
| Toxic Hepatopathy | 4 | | | 46 3.4 |
| Bile Duct, Cyst | | | | 21 2.1 |
| Bile Duct, Hyperplasia | 2 | 2 | | 40 1.9 |
| Centrilobular, Degeneration | | | | 1 3.0 |
| Hepatocyte, Hypertrophy | 4 | 3 | | 48 3.5 |
| Hepatocyte, Multinucleated | 2 | 1 | | 43 1.7 |
| Oval Cell, Hyperplasia | 3 | 3 | | 46 3.0 |
| <hr/> | | | | |
| Mesentery | + | | | 9 |
| Artery, Inflammation, Chronic Active | 3 | | | 8 3.0 |
| Artery, Thrombosis | | | | 1 3.0 |
| Fat, Necrosis | | | | 1 3.0 |
| <hr/> | | | | |
| Oral Mucosa | | | | 3 |
| Gingival, Cyst | | | | 1 3.0 |
| <hr/> | | | | |
| Pancreas | + | + | | 47 |
| Inflammation, Chronic Active | | | | 2 2.0 |
| Acinus, Atrophy, Focal | | | | 1 1.0 |
| Acinus, Atrophy, Diffuse | | | | 1 3.0 |
| Acinus, Vacuolization Cytoplasmic | 1 | 3 | | 42 2.2 |
| Artery, Inflammation, Chronic Active | 3 | | | 12 2.1 |

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 Lab: BAT

| DAY ON TEST | | | | |
|--------------------------------------|-----------|---|---|-----------------|
| | | 0 | 0 | |
| | | 6 | 7 | |
| | | 9 | 3 | |
| | | 9 | 3 | |
| <hr/> | | | | |
| SPRAGUE-DAWLEY RATS | | 0 | 0 | |
| FEMALE | | 0 | 0 | |
| | | 7 | 7 | |
| | ANIMAL ID | 7 | 8 | |
| 4600 UG/KG | | 9 | 0 | |
| | | | | * TOTALS |
| Duct, Dilatation | | 4 | | 3 4.0 |
| Duct, Inflammation | | 3 | | 2 3.0 |
| Duct, Necrosis | | 3 | | 1 3.0 |
| <hr/> | | | | |
| Salivary Glands | | + | + | 51 |
| <hr/> | | | | |
| Stomach, Forestomach | | + | + | 51 |
| Hyperplasia, Squamous | | | | 3 1.7 |
| Inflammation | | | | 1 2.0 |
| Artery, Inflammation, Chronic Active | | | | 1 3.0 |
| <hr/> | | | | |
| Stomach, Glandular | | + | + | 51 |
| Artery, Inflammation, Chronic Active | | | | 1 2.0 |
| <hr/> | | | | |
| Tooth | | | | 7 |
| Peridontal Tissue, Inflammation | | | | 6 1.8 |

CARDIOVASCULAR SYSTEM

| | | | | |
|--------------------------------------|--|---|---|---------------|
| Blood Vessel | | + | + | 51 |
| <hr/> | | | | |
| Heart | | + | + | 50 |
| Cardiomyopathy | | | | 16 1.1 |
| Inflammation | | | | 1 1.0 |
| Artery, Inflammation, Chronic Active | | | | 1 2.0 |
| Coronary Artery, Thrombosis | | | | 1 2.0 |
| Endocardium, Hyperplasia | | | | 2 1.5 |
| Epicardium, Fibrosis | | | | 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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| DAY ON TEST | 0 | 0 | 6 | 7 | 9 | 3 | 9 | 3 |
|----------------------------|---|---|---|---|---|---|---|-----------------|
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 7 | 7 | 7 | 8 |
| FEMALE | 0 | 0 | 7 | 7 | 7 | 8 | 9 | 0 |
| 4600 UG/KG | | | | | | | | |
| | | | | | | | | * TOTALS |

ENDOCRINE SYSTEM

| | | | | | | | | | |
|-----------------------------------|---|---|--|--|--|--|--|-----------|---------------|
| Adrenal Cortex | + | + | | | | | | 49 | |
| Atrophy | 2 | 3 | | | | | | | 35 2.5 |
| Degeneration, Cystic | 2 | 3 | | | | | | | 8 2.5 |
| Hyperplasia | | 3 | | | | | | | 13 2.5 |
| Hypertrophy | 2 | 2 | | | | | | | 34 1.7 |
| Vacuolization Cytoplasmic | 2 | | | | | | | | 18 1.8 |
| Adrenal Medulla | + | + | | | | | | 49 | |
| Hyperplasia | | | | | | | | | 1 1.0 |
| Islets, Pancreatic | + | + | | | | | | 47 | |
| Parathyroid Gland | + | + | | | | | | 47 | |
| Pituitary Gland | + | + | | | | | | 52 | |
| Pars Distalis, Hyperplasia | | | | | | | | | 10 2.0 |
| Thyroid Gland | + | + | | | | | | 49 | |
| Infiltration Cellular, Lymphocyte | | | | | | | | | 1 3.0 |
| C-cell, Hyperplasia | | 3 | | | | | | | 11 2.5 |
| Follicular Cell, Hypertrophy | | | | | | | | | 23 2.0 |

GENERAL BODY SYSTEM

NONE

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

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Page 146

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

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TDMS No. 20304 - 01
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 Lab: BAT

| DAY ON TEST | 0 | 0 | 6 | 7 | 9 | 3 | 9 | 3 |
|----------------------------|---|---|---|---|---|---|---|-----------------|
| <hr/> | | | | | | | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | | | | | | |
| FEMALE | 0 | 0 | | | | | | |
| | 7 | 7 | | | | | | |
| ANIMAL ID | 7 | 8 | | | | | | |
| 4600 UG/KG | 9 | 0 | | | | | | |
| | | | | | | | | * TOTALS |

GENITAL SYSTEM

| | | | | | | |
|----------------------------------|---|---|---|--|-----------|---------------|
| Clitoral Gland | + | + | | | 49 | |
| Inflammation | | | | | | 13 1.2 |
| Duct, Cyst | 2 | 2 | | | | 30 1.9 |
| Ovary | + | + | | | 48 | |
| Cyst | | | | | | 7 2.3 |
| Inflammation | | | | | | 2 3.5 |
| Uterus | + | + | | | 49 | |
| Adenomyosis | | | | | | 1 4.0 |
| Cyst | | | | | | 1 3.0 |
| Hemorrhage | | | | | | 1 2.0 |
| Inflammation | | | | | | 4 2.8 |
| Metaplasia, Squamous | | | | | | 5 1.4 |
| Endometrium, Hyperplasia, Cystic | | | 1 | | | 9 2.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | |
|--------------------|---|---|--|--|-----------|---------------|
| Bone Marrow | + | + | | | 52 | |
| Hyperplasia | 4 | 2 | | | | 47 3.0 |
| Necrosis | | | | | | 1 3.0 |
| Lymph Node | + | | | | 2 | |
| Bronchial, Ectasia | | | | | | 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

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BLANK .. Not examined microscopically

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 Lab: BAT

| DAY ON TEST | | 0 | 0 | | |
|--------------------------------------|--|---|---|-----------------|---------------|
| | | 6 | 7 | | |
| | | 9 | 3 | | |
| | | 9 | 3 | | |
| SPRAGUE-DAWLEY RATS | | 0 | 0 | | |
| FEMALE | | 0 | 0 | | |
| ANIMAL ID | | 7 | 7 | | |
| 4600 UG/KG | | 7 | 8 | | |
| | | 9 | 0 | * TOTALS | |
| Bronchial, Hemorrhage | | | | 1 | 1.0 |
| Lymph Node, Mandibular | | + | + | 51 | |
| Atrophy | | | | | 1 4.0 |
| Hyperplasia, Lymphoid | | | | | 1 3.0 |
| Hyperplasia, Plasma Cell | | | | | 19 1.7 |
| Lymph Node, Mesenteric | | + | + | 47 | |
| Ectasia | | | | | 1 2.0 |
| Spleen | | + | + | 47 | |
| Hematopoietic Cell Proliferation | | | | | 34 1.6 |
| Pigmentation | | | 2 | | 28 1.6 |
| Lymphoid Follicle, Atrophy | | 2 | | | 3 2.0 |
| Red Pulp, Atrophy | | 2 | | | 3 2.0 |
| Thymus | | + | + | 49 | |
| Atrophy | | 4 | 4 | | 44 3.3 |
| Hemorrhage | | | | | 3 2.0 |
| Artery, Inflammation, Chronic Active | | | | | 2 3.0 |
| INTEGUMENTARY SYSTEM | | | | | |
| Mammary Gland | | + | + | 50 | |
| Hyperplasia | | | | | 1 2.0 |
| Skin | | + | + | 51 | |

* .. 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 148

1-4 .. Lesion qualified as:

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 Lab: BAT

| DAY ON TEST | 0 | 0 | 6 | 7 | 9 | 3 | 9 | 3 |
|----------------------------|---|---|---|---|---|---|---|-----------------|
| <hr/> | | | | | | | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | | | | | | |
| FEMALE | 0 | 0 | | | | | | |
| ANIMAL ID | 7 | 7 | | | | | | |
| 4600 UG/KG | 7 | 8 | | | | | | |
| | 9 | 0 | | | | | | |
| | | | | | | | | * TOTALS |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | |
|------|---|---|--|--|--|--|--|--|-----------|
| Bone | + | + | | | | | | | 52 |
|------|---|---|--|--|--|--|--|--|-----------|

NERVOUS SYSTEM

| | | | | | | | | | |
|---------------------|---|---|--|--|--|--|--|--------------|-----------|
| Brain | + | + | | | | | | | 52 |
| Spinal Cord | | | | | | | | 1 | |
| Nerve, Degeneration | | | | | | | | 1 3.0 | |

RESPIRATORY SYSTEM

| | | | | | | | | | |
|---|---|---|---|--|--|--|--|---------------|-----------|
| Lung | + | + | | | | | | | 50 |
| Hemorrhage | | | | | | | | 1 2.0 | |
| Inflammation | | | | | | | | 2 1.5 | |
| Metaplasia, Squamous | 3 | | | | | | | 13 2.2 | |
| Pigmentation | | | | | | | | 1 1.0 | |
| Alveolar Epithelium, Metaplasia, Bronchiolar | | | 2 | | | | | 40 2.0 | |
| Alveolus, Infiltration Cellular, Histiocyte | 1 | | | | | | | 40 1.5 | |
| Artery, Mediastinum, Inflammation, Chronic Active | | | | | | | | 1 2.0 | |
| Nose | + | + | | | | | | | 52 |
| Inflammation | 2 | | | | | | | 23 1.7 | |

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 + .. Tissue examined microscopically
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 Lab: BAT

| DAY ON TEST | 0 | 0 | | |
|---|---|---|--|-----------------|
| | 6 | 7 | | |
| | 9 | 3 | | |
| | 9 | 3 | | |
| <hr/> | | | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | | |
| FEMALE | 0 | 0 | | |
| | 7 | 7 | | |
| ANIMAL ID | 7 | 8 | | |
| 4600 UG/KG | 9 | 0 | | |
| | | | | * TOTALS |
| Nasolacrimal Duct, Inflammation,
Suppurative | | | | 1 3.0 |
| Olfactory Epithelium, Degeneration | | | | 1 2.0 |
| Olfactory Epithelium, Metaplasia | | | | 1 2.0 |
| Respiratory Epithelium, Hyperplasia | | | | 27 1.3 |
| <hr/> | | | | |
| Trachea | + | + | | 52 |
| Inflammation | | | | 1 1.0 |
| <hr/> | | | | |
| SPECIAL SENSES SYSTEM | | | | |
| <hr/> | | | | |
| Eye | + | + | | 52 |
| Retina, Atrophy | | | | 6 2.0 |
| <hr/> | | | | |
| Harderian Gland | + | + | | 52 |
| Infiltration Cellular, Mononuclear Cell | | 1 | | 13 1.0 |
| <hr/> | | | | |
| URINARY SYSTEM | | | | |
| <hr/> | | | | |
| Kidney | + | + | | 50 |
| Cyst | | | | 1 3.0 |
| Mineralization | 1 | 1 | | 25 1.0 |
| Nephropathy | 3 | 2 | | 46 2.2 |
| Pigmentation | 2 | 3 | | 42 2.2 |
| Pelvis, Inflammation | | | | 2 1.5 |
| Transitional Epithelium, Hyperplasia | | | | 3 2.3 |
| <hr/> | | | | |

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 Lab: BAT

| DAY ON TEST | | 0 | 0 | |
|---|-----------|---|---|-----------------|
| | | 6 | 7 | |
| | | 9 | 3 | |
| | | 9 | 3 | |
| | | | | |
| SPRAGUE-DAWLEY RATS
FEMALE | | 0 | 0 | |
| | | 0 | 0 | |
| | | 7 | 7 | |
| | ANIMAL ID | 7 | 8 | |
| 4600 UG/KG | | 9 | 0 | |
| | | | | * TOTALS |
| Urinary Bladder | | + | + | 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

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 CAS Number: 31508-00-6

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 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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

| 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 |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE-DAWLEY 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 |
| 4600 UG/KG STOP | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 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 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus
Muscularis, Inflammation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | 2 | | | | | | | | | |
| Intestine Large, Cecum
Artery, Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | 2 | | | | | | | | | | | | 1 | | |
| Intestine Large, Colon
Parasite Metazoan
Artery, Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Intestine Large, Rectum
Parasite Metazoan
Artery, Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | X | | | | | | | | | | | | | |
| | | | | | | | | | | | | 3 | | | | | | | | | | | 2 | | 3 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver
Angiectasis
Basophilic Focus
Basophilic Focus, Multiple
Cholangiofibrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | 3 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | X | | | | X | X | | | | | | | | X | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 3 |

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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 | 0 | 0 | 0 | 0 | 0 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 7 | 3 | 3 | 5 | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 9 | 3 | 3 | 7 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | |
| | 1 | 4 | 5 | 7 | 2 | 3 | 4 | 3 | 5 | 3 | 8 | 3 | 4 | 3 | 0 | 1 | 5 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 3 | 3 | 3 | 9 | | |
| SPRAGUE-DAWLEY RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4600 UG/KG STOP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| | 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 | 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 | | | |
| Clear Cell Focus | | | X | | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Clear Cell Focus, Multiple Degeneration, Cystic | X | | | | | | | X | | X | X | | | | | | | | | | | X | | | | | | | | |
| Eosinophilic Focus | | | X | | | | | | | X | | X | | | | | | | | | | | X | | | | | | | |
| Eosinophilic Focus, Multiple | | | | X | X | | X | | | | | | | | | | | | X | | | | X | | | | | | 2 | |
| Fatty Change, Focal | | | | | | 2 | | | | | | | | | | | | | | 1 | | | | | | | | | | |
| Fatty Change, Diffuse | | | | | 3 | | | | | 1 | | | | | | | | | 1 | 2 | | 2 | | | | | | | | |
| Hematopoietic Cell Proliferation | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Hepatodiaphragmatic Nodule | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Nodular | | | | X | | | | | | | | | | | | | | | | | | | X | | | | | | | |
| Inflammation | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Mixed Cell Focus, Multiple | | X | X | | | X | X | X | X | X | X | | X | X | | X | X | X | X | | X | X | X | X | X | X | X | X | X | |
| Necrosis | 1 | | | 2 | 2 | | | | | | | 3 | | | 3 | | | | | | | | | | | | 1 | 1 | | |
| Pigmentation | 3 | 2 | 2 | 1 | 1 | 2 | 1 | | 1 | 2 | 1 | 2 | 1 | 2 | 3 | | | 1 | 1 | 1 | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Toxic Hepatopathy | 1 | | | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 3 | | 1 | 1 | 1 | | | | 2 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | | | |
| Bile Duct, Cyst | | | 2 | 2 | | 3 | 2 | | 2 | | | | | 2 | | | | | | | | | 2 | 2 | 2 | | | | | |
| Bile Duct, Fibrosis | | | 1 | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | |
| Bile Duct, Hyperplasia | 2 | | 1 | 3 | | 1 | | 3 | | | | 3 | | 3 | | | | | | 1 | 1 | | 2 | 2 | 3 | | | | | |
| Centrilobular, Degeneration | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Hepatocyte, Hypertrophy | 2 | | 1 | 3 | 3 | | 1 | | 2 | 2 | 2 | 3 | | 1 | 2 | | | | 1 | 2 | 2 | 1 | 2 | 3 | | | | | | |
| Hepatocyte, Multinucleated | | 1 | 1 | | 1 | | 1 | | | 2 | | | | 1 | 2 | | 2 | 1 | | | 3 | 1 | | 1 | 1 | 1 | 1 | | | |
| Oval Cell, Hyperplasia | 2 | 1 | 1 | 4 | | 1 | 1 | | | | 1 | 3 | | 2 | | | | | | | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |
| Acinus, Atrophy, Focal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 |

females (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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|---|
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| ANIMAL ID | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 4600 UG/KG STOP | 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 | 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...) | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acinus, Vacuolization Cytoplasmic
Artery, Inflammation, Chronic Active | 1 | | | | | 1 | 1 | | | 1 | 1 | | 1 | | | | | | 1 | | 1 | | 1 | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach
Hyperplasia, Squamous
Inflammation
Ulcer
Artery, Inflammation, Chronic Active | + | + | + | + | 2 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular
Erosion
Mineralization | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue
Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth
Peridontal Tissue, Inflammation | | | | | | | + | | | | | | | | | | | + | | | | | | | | + | + |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart
Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | | 1 | | | | 1 | 1 | 1 | | | | | | | | | | | 1 | 1 | 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
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TDMS No. 20304 - 01
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TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
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 First Dose M/F: NA / 03/26/04
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------|
| | 06777 | 00637 | 00350 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | females (cont...) |
| 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 | |
| 4600 UG/KG STOP | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| ANIMAL ID | 00001 | 00002 | 00003 | 00004 | 00005 | 00006 | 00007 | 00008 | 00009 | 00010 | 00011 | 00012 | 00013 | 00014 | 00015 | 00016 | 00017 | 00018 | 00019 | 00020 | 00021 | 00022 | 00023 | 00024 | 00025 | 00026 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Atrophy | | | | | | | | | | | | | | | | | 2 | | | | | 3 | | | | | |
| Degeneration, Cystic | | | 2 | | | | | | | | 2 | | | | | | 1 | | | | | | 2 | 3 | 3 | | |
| Fibrosis | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 3 | | | | | | 3 | | | | 3 | | | 2 | | | | | | | | | 2 | 2 | 2 | | |
| Hypertrophy | | 2 | 3 | 1 | | | 1 | 3 | 1 | 1 | | | 1 | 1 | 2 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 1 | 3 | | | |
| Necrosis | | | | | | | | | | | | | | | | | 1 | | | | | | | | 3 | | |
| Vacuolization Cytoplasmic | | 1 | | 2 | | | | 2 | 2 | | | | | 2 | | 2 | | | | 1 | 1 | 1 | 1 | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | 1 | 2 | | | | | | | | | | | | 2 | 1 | 1 | | | | | | | 1 | | 2 | 2 | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Vacuolization Cytoplasmic | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Hyperplasia | | | | 2 | | | | | | | | | | | | | 4 | 2 | | | | 3 | | | 1 | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| C-cell, Hyperplasia | | | | | | | | | | 2 | | | | | | | | | | | | | | | 3 | | |
| Follicular Cell, Hypertrophy | | | | | | | | | | | 3 | | | | | 2 | 2 | | | | | | | | 1 | 3 | 3 |

GENERAL BODY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
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Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

| 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 | | | |
|----------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPRAGUE-DAWLEY RATS FEMALE | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 4600 UG/KG STOP | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| ANIMAL ID | | 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 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| | | 7 | 3 | 3 | 5 | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 9 | 3 | 3 | 7 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 8 |
| | | 1 | 4 | 5 | 7 | 2 | 3 | 4 | 3 | 5 | 3 | 8 | 3 | 4 | 3 | 0 | 1 | 5 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 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 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females (cont...)

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia, Squamous | | | | | | | | | | | | | 2 | | | | | | | | | | | | | |
| Inflammation | | 1 | 1 | 2 | | | | | 3 | | 1 | 1 | | 1 | 1 | | | 1 | 1 | | 1 | | 1 | 2 | | |
| Duct, Cyst | | | | | | 2 | 2 | | 3 | | | | | 3 | | 1 | 2 | 1 | 2 | 3 | | | | | 2 | 1 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | 2 | | | | | | | 2 | | | | | 2 | | | | | | 3 | | | | | 2 | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage | | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation | | | | | | | | | | | | | | | | | | | | | | 3 | | | | |
| Metaplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endometrium, Hyperplasia, Cystic | | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia | | 4 | | 4 | 4 | 4 | 2 | 2 | | 3 | 4 | 3 | 4 | 2 | 2 | 2 | 3 | 4 | 2 | 3 | | 3 | 2 | 3 | 3 | 4 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
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TDMS No. 20304 - 01
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Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| 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 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 7 | 3 | 3 | 5 | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 9 | 3 | 3 | 7 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 8 |
| | 1 | 4 | 5 | 7 | 2 | 3 | 4 | 3 | 5 | 3 | 8 | 3 | 4 | 3 | 0 | 1 | 5 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 9 |
| SPRAGUE-DAWLEY 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 |
| 4600 UG/KG STOP | 0 | 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 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 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 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Hyperplasia, Plasma Cell | 1 | 2 | 1 | | | 2 | 1 | 1 | 2 | | | | | 2 | | | 2 | | | | | 2 | 2 | | |
| Lymph Node, Mesenteric Atrophy Hemorrhage | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen Hematopoietic Cell Proliferation Pigmentation Lymphoid Follicle, Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 1 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 | 1 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 3 |
| | | 3 | | 2 | | 3 | | 3 | 1 | 1 | | 2 | | 3 | 1 | 1 | | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 |
| Thymus Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | 4 | 3 | 3 | 4 | 3 | 2 | 2 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 3 | 4 | 2 | 4 | 2 | 3 | | 3 | 2 | 4 | 3 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Cyst Hyperplasia Inflammation, Granulomatous | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | 3 | | | | | | | 3 | | | | | | 2 | | | 2 | | | 3 |
| | | | | | | | | | | | | | | | | | | | | | | 2 | | | 2 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Fracture | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|---|
| | 6 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 6 | 7 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 7 | 3 | 3 | 5 | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 9 | 3 | 3 | 7 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 8 | |
| | 1 | 4 | 5 | 7 | 2 | 3 | 4 | 3 | 5 | 3 | 8 | 3 | 4 | 3 | 0 | 1 | 5 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 9 | | |
| SPRAGUE-DAWLEY 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 | 0 | 0 | 0 | 0 | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| 4600 UG/KG STOP | 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 | females (cont...) | |

Skeletal Muscle

+

NERVOUS SYSTEM

Brain Hemorrhage

+ +

RESPIRATORY SYSTEM

Lung
 Inflammation
 Alveolar Epithelium, Hyperplasia
 Alveolar Epithelium, Metaplasia, Bronchiolar
 Alveolus, Infiltration Cellular, Histiocyte

+
 2 1
 1 3 2 1 1 1 2 3 2 2 3 2 3 2
 2 3 2 1 2 1 1 2 2 1 2 2 1 2 2 1 2 1 2 1

Nose
 Inflammation
 Glands, Cyst
 Olfactory Epithelium, Metaplasia
 Respiratory Epithelium, Hyperplasia
 Respiratory Epithelium, Metaplasia, Squamous

+
 1 1 2 1
 1 1
 2

Trachea

+ +

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
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| 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 | 7 | 7 | 6 | 3 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 7 | 3 | 3 | 5 | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 9 | 3 | 3 | 7 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 8 |
| | 1 | 4 | 5 | 7 | 2 | 3 | 4 | 3 | 5 | 3 | 8 | 3 | 4 | 3 | 0 | 1 | 5 | 3 | 4 | 5 | 5 | 4 | 3 | 3 | 9 |

| SPRAGUE-DAWLEY 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 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 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 |
| 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 |

4600 UG/KG STOP

females (cont...)

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland
Infiltration Cellular, Mononuclear Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | 1 | | | | | | | | 1 | | | | | | | 1 | 1 | 1 | | 1 | 1 | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Accumulation, Hyaline Droplet | | | | 3 | | | | | | | | 2 | | | | | | | | | | | | | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Cyst | | | | | | | | | | | | | | | 3 | | | | | | | | | | |
| Mineralization | 1 | 1 | 1 | | | 1 | | | 1 | 1 | 1 | 1 | | 1 | 2 | | 1 | | | | 1 | | | 1 | 1 |
| Nephropathy | 1 | 2 | 1 | 2 | | 2 | 4 | 2 | 2 | 1 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 |
| Pigmentation | | | 1 | 2 | | 1 | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pelvis, Dilatation | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pelvis, Inflammation | | | | | 1 | | | | | | | | | | | | | | | | | | | | 1 |
| Ureter | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation | | | | | | | | | | | | | | | | | 2 | | | | | | | | |

* .. 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. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

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

| SPRAGUE-DAWLEY 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 | 0 | 0 |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 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 |

4600 UG/KG STOP

*** TOTALS**

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Muscularis, Inflammation | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Intestine Large, Cecum | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Intestine Large, Colon | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Parasite Metazoan | | | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | 3 | | | | | | | | | | | | | | | 2 3.0 |
| Intestine Large, Rectum | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Parasite Metazoan | | | | | | | | | | | | | | | | X | | | | | | | | | 2 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | 3 | | | | 3 | | | | | | | | | | | 5 2.8 |
| Intestine Small, Duodenum | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Jejunum | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | X | | | | | 5 |
| Basophilic Focus, Multiple | | | X | X | X | | | X | | | | | | | | | | | | | | | | | 4 |
| Cholangiofibrosis | | 2 | | | 1 | 3 | | | | | | | 1 | | | | | 2 | | | | | | | 10 2.0 |

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

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|-----|-----|
| | 1 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 5 | 7 | | 2 | |
| | 6 | 4 | 3 | 3 | 3 | 3 | 1 | 8 | 3 | 7 | 9 | 7 | 8 | 4 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | |
| | 0 | 2 | 4 | 4 | 3 | 3 | 3 | 0 | 4 | 2 | 6 | 5 | 2 | 5 | 7 | 5 | 3 | 7 | 3 | 3 | 5 | 4 | 7 | 4 | 7 | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| 4600 UG/KG STOP | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| ANIMAL ID | 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 | |
| Clear Cell Focus | | | | | | | X | | | | | | | | | | | | | | | | | | 3 | |
| Clear Cell Focus, Multiple | | | | X | X | | | | | | | | | | | | | X | X | | | | X | | 10 | |
| Degeneration, Cystic | | | | | | | | 2 | | | | | 2 | | | | | | | | | | | | 4 | 2.3 |
| Eosinophilic Focus | | | X | | | | | | | | X | | | | | | | | | | | | X | | 7 | |
| Eosinophilic Focus, Multiple | X | | X | | X | X | | X | | X | X | | | | | X | | | | | | | | | 13 | |
| Fatty Change, Focal | | | | | 1 | | | 1 | | | | 1 | | 1 | 1 | | | 2 | | | | | 1 | | 9 | 1.2 |
| Fatty Change, Diffuse | | | | | | | | | 1 | | | | | | | | | | | 1 | | | | 3 | 8 | 1.8 |
| Hematopoietic Cell Proliferation | | | 1 | 2 | 1 | 1 | 1 | | 1 | 1 | | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | | 31 | 1.1 |
| Hepatodiaphragmatic Nodule | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4 |
| Hyperplasia, Nodular | | | | | | X | | | | | X | | | | | | | | | | | | | | 4 | |
| Inflammation | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 47 | 1.1 |
| Mixed Cell Focus | | | | | | | | | | | | | | | X | | | | | | | | | | 2 | |
| Mixed Cell Focus, Multiple | | | | X | X | X | X | | X | X | X | X | | | | X | X | X | X | X | X | X | X | X | 34 | |
| Necrosis | | | | 1 | | 1 | 3 | | | | | 2 | 2 | 2 | | | | | 1 | | | | | | 14 | 1.8 |
| Pigmentation | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | 2 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 43 | 1.4 |
| Toxic Hepatopathy | 2 | | 1 | | 3 | 2 | | 2 | 2 | 2 | | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | | | 1 | | 36 | 1.7 | |
| Bile Duct, Cyst | | | | | 1 | | | 3 | | | 3 | | | | | 4 | 2 | | | | | | | 14 | 2.3 | |
| Bile Duct, Fibrosis | | | | | | 1 | | 2 | | | | | | | 1 | | | | | | | | 1 | 7 | 1.1 | |
| Bile Duct, Hyperplasia | | | | 2 | 2 | 2 | 2 | 2 | 1 | | | 1 | 1 | | 2 | | 1 | 1 | | 1 | 2 | | | 25 | 1.9 | |
| Centrilobular, Degeneration | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2.5 |
| Hepatocyte, Hypertrophy | 3 | | | | 2 | 3 | | 2 | 2 | 1 | | 2 | 2 | | 2 | 2 | | 2 | 1 | | | | 2 | 30 | 2.0 | |
| Hepatocyte, Multinucleated | | 1 | 1 | 1 | 1 | 3 | 1 | | 2 | 1 | | 2 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 32 | 1.3 | |
| Oval Cell, Hyperplasia | 1 | | 2 | 1 | 2 | 2 | | 2 | 2 | | | 1 | 1 | | 2 | | 1 | 1 | | | 1 | | | 29 | 1.7 | |
| Mesentery | | | | | | | + | | + | | | | | | | | | | | | | | | 9 | 5 | 2.6 |
| Artery, Inflammation, Chronic Active | | | | | | | 3 | | | | | | | | | | | | | | | | | | | |
| Pancreas | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Amyloid Deposition | | 2 | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Inflammation, Chronic Active | | 2 | | | | | | 1 | | | | | | | | | | | | | | | | | 4 | 1.3 |
| Acinus, Atrophy, Focal | | 2 | | | | | | 2 | | | | | | | | | | | | | | | | | 4 | 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
 Page 161

| | | 0 | 0 | 0 | 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 | 0 | 1 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 2 | | | |
| | 6 | 4 | 3 | 3 | 3 | 3 | 1 | 8 | 3 | 7 | 9 | 7 | 8 | 4 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | | | |
| | 0 | 2 | 4 | 4 | 3 | 3 | 3 | 0 | 4 | 2 | 6 | 5 | 2 | 5 | 7 | 5 | 3 | 7 | 3 | 3 | 5 | 4 | 7 | 4 | 7 | | | |
| SPRAGUE-DAWLEY 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 | |
| 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 | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | |
| 4600 UG/KG STOP | 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 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|----|-----|-----|
| Acinus, Vacuolization Cytoplasmic | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 10 | 1.0 | |
| Artery, Inflammation, Chronic Active | 2 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 1.8 | |
| Salivary Glands | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Stomach, Forestomach | M | + | | | | | | | | | | | | | | | | | | | | | | | 49 | | | |
| Hyperplasia, Squamous | | 2 | | | | | | | | | | | | | | | | | | | | | | | 2 | 5 | 2.2 | |
| Inflammation | | 2 | | | | | | | | | | | | | | | | | | | | | | | 3 | 4 | 2.3 | |
| Ulcer | | 2 | | | | | | | | | | | | | | | | | | | | | | | 2 | 3 | 2.3 | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 3.0 | |
| Stomach, Glandular | M | + | | | | | | | | | | | | | | | | | | | | | | | 49 | | | |
| Erosion | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2.0 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1.0 | |
| Tongue | | + | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| Degeneration | | 2 | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2.0 | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | 7 | | | |
| Peridontal Tissue, Inflammation | | + | | | | | | | | | | | | | | | | | | | | | | | 3 | 2 | 7 | 2.0 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|----|---|---|---|---|---|--|----|-----|
| Blood Vessel | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | |
| Heart | + | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | |
| Cardiomyopathy | | 1 | | | | | | | | | | | | | | | | | | | | | | | 1 2 | 1 | 2 | 1 | 1 | 1 | 1 | | 19 | 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

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TDMS No. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
TEF evaluation (PCB 118)
CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
Time Report Requested: 12:05:16
First Dose M/F: NA / 03/26/04
Lab: BAT

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

| SPRAGUE-DAWLEY 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 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 4600 UG/KG STOP | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | * TOTALS |

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|-----|
| Clitoral Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Inflammation | | | 1 | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | | 2 | | 2 | 1 | 3 | 1 | | 2 | | | | | 29 | 1.3 | | |
| Duct, Cyst | | 1 | | | 1 | 1 | | | | 2 | 2 | | 2 | 1 | 1 | | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | | | 28 | 1.8 | | |
| Ovary | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | | |
| Cyst | | | | | 3 | 3 | | | | 3 | 3 | | | | | 2 | | | | | | | | | | | | | 10 | 2.5 | |
| Inflammation | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Uterus | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Inflammation | | 3 | | | 2 | | | 3 | | | | 1 | | | 2 | | 2 | | | | | | | | | | | | 10 | 2.1 | |
| Metaplasia, Squamous | | | | | | | 4 | 1 | | 1 | 2 | | 1 | | | 1 | 1 | | 1 | 1 | | 1 | | | 2 | | | 23 | 1.6 | | |
| Endometrium, Hyperplasia, Cystic | | | | | 4 | 3 | 2 | | | 4 | 1 | | 4 | 4 | | 4 | 2 | 4 | 2 | 2 | | | | | | | | 21 | 2.7 | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Hyperplasia | | 2 | 3 | 3 | 2 | 2 | 3 | 4 | 4 | 2 | 2 | 3 | 3 | 3 | 4 | 2 | 2 | | 4 | 3 | 3 | | | 3 | 2 | | | 43 | 2.9 | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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 164

TDMS No. 20304 - 01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)
 CAS Number: 31508-00-6

Date Report Requested: 06/26/2008
 Time Report Requested: 12:05:16
 First Dose M/F: NA / 03/26/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 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 | | |
| | 1 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 2 | |
| | 6 | 4 | 3 | 3 | 3 | 3 | 1 | 8 | 3 | 7 | 9 | 7 | 8 | 4 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | |
| | 0 | 2 | 4 | 4 | 3 | 3 | 3 | 0 | 4 | 2 | 6 | 5 | 2 | 5 | 7 | 5 | 3 | 7 | 3 | 3 | 5 | 4 | 7 | 4 | 7 | |
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 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 | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| ANIMAL ID | 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 | |
| 4600 UG/KG STOP | 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, Plasma Cell | | | 1 | 2 | | 2 | | 2 | 2 | 2 | | | | | | | | 2 | 2 | 1 | | | 2 | | | 22 1.7 | |
| Lymph Node, Mesenteric | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | 3 | | | 1 3.0 | |
| Hemorrhage | | | 2 | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 | |
| Spleen | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hematopoietic Cell Proliferation | | | 2 | 3 | 2 | 3 | 3 | 3 | 1 | | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | | 3 | 1 | | | 43 2.1 | |
| Pigmentation | | | 2 | 2 | | | | | 2 | 2 | | | 1 | | 1 | 2 | 3 | | 2 | | 1 | 3 | | 2 | 2 | 31 1.9 | |
| Lymphoid Follicle, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Atrophy | | | 4 | 2 | 2 | 4 | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 3 | | 3 | 2 | 3 | 3 | 2 | 4 | 2 | 46 3.0 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cyst | | | | | | | | | | | | 3 | | | | | | | | | | | | | | 5 2.8 |
| Hyperplasia | | | | 1 | | | | | | 1 | | | | | | | | | | | | | | | | 4 1.5 |
| Inflammation, Granulomatous | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 4 2.0 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fracture | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 x .. Lesion present
 I .. Insufficient tissue
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TDMS No. 20304 - 01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: RATS/SD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

TEF evaluation (PCB 118)

CAS Number: 31508-00-6

Date Report Requested: 06/26/2008

Time Report Requested: 12:05:16

First Dose M/F: NA / 03/26/04

Lab: BAT

| 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 |
|----------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 5 | 5 | 5 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 2 |
| | 6 | 4 | 3 | 3 | 3 | 3 | 1 | 8 | 3 | 7 | 9 | 7 | 8 | 4 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 6 | 3 | 0 |
| | 0 | 2 | 4 | 4 | 3 | 3 | 3 | 0 | 4 | 2 | 6 | 5 | 2 | 5 | 7 | 5 | 3 | 7 | 3 | 3 | 5 | 4 | 7 | 4 | 7 |
| SPRAGUE-DAWLEY RATS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 |
| 4600 UG/KG STOP | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| ANIMAL ID | 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 | | | | | | | | | | | | | | | | | | | | | | | | |

*** END OF REPORT ***

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

+ .. Tissue examined microscopically

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