

TDMS No. 20009 - 04
Test Type: CHRONIC
Route: DOSED WATER
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
CAS Number: 108-99-6

Date Report Requested: 05/27/2011
Time Report Requested: 09:52:36
First Dose M/F: 11/09/04 / 11/08/04
Lab: BAT

F2_M3

C Number: C20009
Lock Date: 05/05/2008
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.4.1.0_004
PWG Approval Date: 12/14/2010

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B6C3F1 MICE MALE	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		7	5	7	6	5	5	7	7	6	7	7	7	5	4	7	7	6	5	6	7	7	7	7	7	7	
0 mg/l	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	males (cont...)
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Gallbladder	+	+	+	+	A	A	+	+	A	+	+	+	+	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	A	A	+	+	A	+	+	+	A	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	A	+	+	A	+	+	+	+	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	A	+	+	A	+	+	+	A	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	A	+	+	A	+	+	+	A	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	A	A	+	+	A	+	+	+	A	A	+	+	A	A	A	+	+	+	+	+	+
Intestine Small, Jejunum Diverticulum	+	+	+	+	A	A	+	+	A	+	+	A	A	A	+	+	A	A	A	+	+	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Angiectasis																									
Basophilic Focus			X		X	X												X							
Clear Cell Focus	X		X				X			X		X				X		X			X				
Eosinophilic Focus	X		X				X	X				X		X					X	X	X		X		X
Hematopoietic Cell Proliferation																									
Mixed Cell Focus													X												
Necrosis					2														3						3
Mesentery						+														+		+			
Inflammation, Chronic Active						4																			

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1-4 .. Lesion qualified as:
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		7	5	7	6	5	5	7	7	6	7	7	5	4	7	7	6	5	6	7	7	7	7	7	7		
0 mg/l	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		
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	males (cont...)

Fat, Necrosis																									2	2
Pancreas Atrophy	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Stomach, Forestomach Hyperplasia, Squamous Ulcer	+	+	+	+	A	+	+	+	+	+	+	+	2	3	+	+	+	+	+	+	+	+	+	+	2	1
Stomach, Glandular Ulcer	+	+	+	+	A	A	+	+	+	+	+	+	+	A	+	+	A	A	+	+	+	+	+	+	+	+
Tooth Dysplasia	+	+	+			+				+	+	+	+	+	+				+	+	+	+	+	+	+	+
	X	X	X			X				X	X	X	X	X	X				X	X	X	X	X	X	X	X

CARDIOVASCULAR SYSTEM

Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Cardiomyopathy	1					1				1				1	1			1							
Inflammation, Suppurative																									
Mineralization																									
Thrombosis					2																				

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	+
Hyperplasia												2			2								2		
Hypertrophy	3					2	2		2					2										2	

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B6C3F1 MICE MALE 0 mg/l	DAY ON TEST	0 7 3 1	0 5 4 3	0 7 3 2	0 6 7 0	0 5 5 6	0 7 5 2	0 7 7 2	0 6 3 2	0 7 3 7	0 7 3 1	0 7 3 1	0 5 0 9	0 4 5 5	0 7 3 1	0 7 3 0	0 6 1 9	0 5 4 3	0 6 4 6	0 7 3 1	0 7 3 2	0 7 3 2	0 7 3 1	0 7 3 2	males (cont...)	
	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 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 1	0 0 0 2	0 0 0 2	0 0 0 2	0 0 0 2		0 0 0 2
Adrenal Medulla Hyperplasia		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	
Islets, Pancreatic		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parathyroid Gland		+	+	M	+	M	+	+	M	M	M	+	+	+	+	+	M	+	M	+	+	+	M	+	+	
Pituitary Gland Thrombosis Pars Distalis, Hyperplasia		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	M	+	M	+	+	+	+	+	+	
Thyroid Gland		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
GENERAL BODY SYSTEM		NONE																								
GENITAL SYSTEM																										
Coagulating Gland Inflammation, Suppurative		+																								
Epididymis		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Preputial Gland Inflammation, Chronic Active		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	3	2	
Prostate Inflammation, Suppurative		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Seminal Vesicle		+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+		

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B6C3F1 MICE MALE	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	
0 mg/l		7	5	7	6	5	5	7	7	6	7	7	5	4	7	7	6	5	6	7	7	7	7	7		
		3	4	3	7	0	6	3	3	2	3	3	0	1	5	3	3	1	4	4	3	3	3	3		
		1	3	2	0	8	2	2	2	7	1	1	0	9	5	1	0	9	3	6	1	2	2	2		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2		
		1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	males (cont...)	

Inflammation, Suppurative

Testes + + + + + + + + + + + + + + + + + + + + + + + +
 Atrophy 3

HEMATOPOIETIC SYSTEM

Bone Marrow + + + + + + + + + + + + + + + + + + + + + + + +
 Lymph Node Renal, Hyperplasia, Lymphoid +
 4
 Lymph Node, Mandibular + + + + + + + + + + + + + + + + + + + + + + + +
 Lymph Node, Mesenteric + + + + + M + + A + + + + + + + + A + + + + + + + +
 Spleen Hematopoietic Cell Proliferation + + + + + + + + + + + + + + + + + + + + + + + +
 Hyperplasia, Lymphoid 2
 Thymus + + + + + + + + A + + + + + M + A + + + + + + + +

INTEGUMENTARY SYSTEM

Mammary Gland M M M M M M M M M M M M M M M M M M M M M M M M
 Skin + + + + + + + + + + + + + + + + + + + + + + + +
 Cyst Epithelial Inclusion
 Inflammation, Chronic Active 4 4

MUSCULOSKELETAL SYSTEM

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	0 7 3 1	0 5 4 3	0 7 3 2	0 6 7 0	0 5 6 8	0 5 3 2	0 7 3 2	0 7 3 2	0 6 3 7	0 7 3 2	0 7 3 1	0 7 3 1	0 5 0 9	0 4 5 5	0 7 3 1	0 7 3 0	0 6 1 4	0 5 4 3	0 6 4 6	0 7 3 1	0 7 3 2	0 7 3 2	0 7 3 1	0 7 3 2				
0 mg/l	0 0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	0 0 0 0 6	0 0 0 0 7	0 0 0 0 8	0 0 0 0 9	0 0 0 0 0	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 1	0 0 0 0 2	0 0 0 0 2	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5	males (cont...)

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

NERVOUS SYSTEM

Brain	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Glial Cell, Pigmentation																																	

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Hemorrhage	1																																
Inflammation, Granulomatous																														3			
Alveolar Epithelium, Hyperplasia	1																																
Alveolus, Infiltration Cellular, Histiocyte																																	
Bronchiole, Hyperplasia																																	
Nose	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Suppurative											3		1																				
Olfactory Epithelium, Atrophy			2																														
Olfactory Epithelium, Metaplasia, Respiratory	1											1				1				1				1				1					1
Respiratory Epithelium, Hyperplasia							1						1						1					1				2					
Trachea	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	A	A	+	+	A	+	+	+	A	A	+	+	A	A	A	+	+	+	+	+	+	+	+	+	+	+	+	
Degeneration																																

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B6C3F1 MICE MALE 0 mg/l	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	
	7	5	7	6	5	5	7	7	6	7	7	7	5	4	7	7	6	5	6	7	7	7	7	7	7		
	3	4	3	7	0	6	3	3	2	3	3	0	1	5	3	3	1	4	4	3	3	3	3	3	3		
	1	3	2	0	8	2	2	2	7	1	1	0	9	5	1	0	9	3	6	1	2	2	2	1	2		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2		
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5		males (cont...)

Retina, Hemorrhage, Chronic

Harderian Gland
Hyperplasia

+ + + + + + + + + + + + + + A + + A + A + + + + + +

URINARY SYSTEM

Kidney
 Cyst
 Hydronephrosis
 Inflammation, Suppurative
 Metaplasia, Osseous
 Mineralization
 Nephropathy
 Thrombosis
 Papilla, Necrosis
 Renal Tubule, Pigmentation

+ + + + + + + + + + + + + + + + + + + + + + + + + +
 3
 1
 1 1 3 2 2 3 1 2 2 3 3 2 2 2 2 1 1 2 2 1 3 3 3
 4

Urethra
Inflammation, Suppurative

+

Urinary Bladder
Hemorrhage
Inflammation, Suppurative

+ + + + + A + + A + + + A + + + A + + + + + + + + + + + + + + + +

1

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 X .. Lesion present
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| B6C3F1 MICE MALE | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|---|
| | | 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 mg/l | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | | |
| | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------|-------|
| Esophagus | + | | | | | | | | | | | | | | | | | | | | 50 | |
| Gallbladder | A | | | | | | | | | | | | | | | | | | | | 36 | |
| Intestine Large, Cecum | A | | | | | | | | | | | | | | | | | | | | 35 | |
| Intestine Large, Colon | A | | | | | | | | | | | | | | | | | | | | 40 | |
| Intestine Large, Rectum | A | | | | | | | | | | | | | | | | | | | | 39 | |
| Intestine Small, Duodenum | A | | | | | | | | | | | | | | | | | | | | 36 | |
| Intestine Small, Ileum | A | | | | | | | | | | | | | | | | | | | | 36 | |
| Intestine Small, Jejunum
Diverticulum | A | | | | | | | | | | | | | | | | | | | | 35 | 1 |
| Liver | + | | | | | | | | | | | | | | | | | | | | 50 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Basophilic Focus | X X | | | | | | | | | | | | | | | | | | | | 10 | |
| Clear Cell Focus | X X X | | | | | | | | | | | | | | | | | | | | 15 | |
| Eosinophilic Focus | X X X | | | | | | | | | | | | | | | | | | | | 18 | |
| Hematopoietic Cell Proliferation | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Mixed Cell Focus | X X | | | | | | | | | | | | | | | | | | | | 5 | |
| Necrosis | 2 4 | | | | | | | | | | | | | | | | | | | | 5 2.8 | |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | 7 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

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 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|----------------------|----------|
| | 0567 | 0567 | 0445 | 0445 | 0557 | 0557 | 0667 | 0667 | 0777 | 0777 | 0777 | 0777 | 0666 | 0444 | 0444 | 0777 | 0666 | 0777 | 0777 | 0555 | 0777 | 0555 | 0557 | 0777 | | |
| 0 mg/l | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0026 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | |
| Fat, Necrosis | | | | | | | | | | 2 | | | | | | 2 | | | | | | | | | 5 2.0 | |
| Pancreas Atrophy | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49
1 1.0 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach Hyperplasia, Squamous Ulcer | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47
2 2.0
5 2.2 | |
| Stomach, Glandular Ulcer | A | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42
1 2.0 | |
| Tooth Dysplasia | + | | + | + | | + | + | + | | + | | + | + | + | | + | + | + | + | + | + | + | + | + | 35
35 | |
| X | | X | X | | X | X | X | | X | | X | X | X | | X | X | X | X | X | X | X | X | X | X | | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | | | | | | 1 | | | | | | 1 | 1 | | | | 1 | 1 | | | 1 | | | 12 1.0 | |
| Inflammation, Suppurative | | | | 1 | | | | | | | | | | | | | | 4 | | | | | | | 2 2.5 | |
| Mineralization | | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hyperplasia | | | | | | | | | | | | | | 2 | | | | 2 | | 2 | 2 | | | 2 | 10 2.0 | |
| Hypertrophy | 2 | 2 | | | | | | 2 | | | | | 2 | | | | | 2 | | 2 | | | | 12 2.1 | | |

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
0 mg/l | 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 | * TOTALS |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | ANIMAL ID | 5 | 5 | 4 | 5 | 4 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 4 | 4 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 5 | 7 | |
| | | 6 | 9 | 4 | 8 | 0 | 9 | 3 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 3 | 2 | 3 | 3 | 9 | 1 | 2 | 0 | 3 | | |
| | | 7 | 6 | 1 | 5 | 2 | 0 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 8 | 5 | 0 | 1 | 4 | 1 | 1 | 4 | 7 | 4 | 5 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|----------------|
| Adrenal Medulla
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Islets, Pancreatic | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Parathyroid Gland | + | M | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | M | + | + | M | + | + | + | 37 | | |
| Pituitary Gland
Thrombosis | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0
1 3.0 |
| Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-------|
| Coagulating Gland
Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Preputial Gland
Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.7 |
| Prostate
Inflammation, Suppurative | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 2.8 |
| Seminal Vesicle | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE

0 mg/l | 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 | * TOTALS | | | | |
|-----------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|---|---------------------|
| | ANIMAL ID | 5 | 5 | 4 | 5 | 4 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 4 | 4 | 7 | 6 | 7 | 7 | 5 | 7 | 5 | 5 | | 7 | | | |
| | | 6 | 9 | 4 | 8 | 0 | 9 | 3 | 1 | 3 | 3 | 3 | 3 | 4 | 5 | 6 | 3 | 2 | 3 | 3 | 9 | 1 | 2 | 0 | | 3 | | | |
| Bone | | 7 | 6 | 1 | 5 | 2 | 0 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 8 | 5 | 0 | 1 | 4 | 1 | 1 | 4 | 7 | 5 | 1 | 50 | | | |
| Skeletal Muscle | | 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 | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Glial Cell, Pigmentation | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 1.0 | | | |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Hemorrhage | | | | | | | | | | | | | | | | 2 | | | | | | | | | | 2 1.5 | | | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | 2 | | 3 | | | | | | 1 | | | 4 1.8 | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 3 | | 1 | | 2 2.0 | | | |
| Bronchiole, Hyperplasia | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1 1.0 | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Inflammation, Suppurative | | | | | | 1 | | | | | | | | | 1 | | | | | | | | | | | 4 1.5 | | | |
| Olfactory Epithelium, Atrophy | | | | | | | 1 | | | | | | | | | | | | | | | 1 | | | | 3 1.3 | | | |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | | | | | | | 1 | 1 | | 1 | | | | | | | | | | | 8 1.0 | | | |
| Respiratory Epithelium, Hyperplasia | | 3 | | 1 | | | 1 | | 3 | | 1 | 1 | 1 | 2 | 1 | | | | | 1 | | 1 | | 1 | | 18 1.3 | | | |
| Trachea | | A | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | | | | |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | A | A | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | 36 |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | | 1 4.0 |

* .. 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

TDMS No. 20009 - 04
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 beta-Picoline
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| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| B6C3F1 MICE MALE | DAY ON TEST | 0732 | 0642 | 0732 | 0753 | 0773 | 0773 | 0773 | 0753 | 0776 | 0777 | 0777 | 0755 | 0777 | 0777 | 0768 | 0773 | 0766 | 0755 | 0744 | 0766 | 0773 | 0744 | 0773 |
| | ANIMAL ID | 0051 | 0052 | 0053 | 0054 | 0055 | 0056 | 0057 | 0058 | 0059 | 0060 | 0061 | 0062 | 0063 | 0064 | 0065 | 0066 | 0067 | 0068 | 0069 | 0070 | 0071 | 0072 | 0073 |

males
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Gallbladder
Degeneration, Hyaline | + | + | + | A | A | + | + | + | A | + | A | + | + | + | + | A | M | A | A | + | A | + | A | + |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | A | + | A | A | + | + | + | A | + | A | + | + | + | + | A | + | A | A | A | A | + | A | + |
| Intestine Large, Colon | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | A | + | A | + | A | A | + | A | + |
| Intestine Large, Rectum | + | A | + | A | + | + | + | + | + | A | + | + | + | + | + | A | + | A | + | A | A | + | A | + |
| Intestine Small, Duodenum | + | A | + | A | A | + | + | + | A | + | A | + | + | + | + | A | + | A | + | A | A | + | A | + |
| Intestine Small, Ileum | + | A | + | A | A | + | + | + | A | + | A | + | + | + | + | A | + | A | + | A | A | + | A | + |
| Intestine Small, Jejunum
Peyer's Patch, Hyperplasia, Lymphoid | + | A | + | A | A | + | + | + | A | + | A | + | + | + | + | A | + | A | + | A | A | + | A | + |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | X | | | | X | X | | | | | | X | | X | | X | | | X | |
| Clear Cell Focus | | | X | | | X | X | | | X | | X | | | | | | | | X | X | X | X | X |
| Eosinophilic Focus | X | | | | | X | | X | | X | | X | X | | X | X | X | | X | | | | | |
| Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | | | | | | | X | | | | | | | | | | | | | | X | | | |
| Necrosis | | | | | | | | | | | | 3 | | | | 3 | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B6C3F1 MICE MALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 6 | 5 | 4 | 6 | 7 | 4 |
| 312.5 mg/l | 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 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | |

males (cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pancreas | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach
Hyperplasia, Squamous
Ulcer | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + |
| | | | | | | | | | | 3 | | | | | | | | | | | | | | |
| | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Stomach, Glandular
Mineralization
Ulcer | + | A | + | A | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | A | + |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth
Dysplasia | + | | + | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | + | + | + | + |
| | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | X | X | X | X |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | 1 | | | | | 1 | | | | | 1 | | 1 | 2 | | | | | 1 | | | | 1 | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | 2 | | | 4 | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 | | | | | | 2 | | | | | | | | | 2 | | | | | | 2 | | |
| Hypertrophy | | | | | | | 2 | 2 | | | | | 2 | | | 2 | | | | | | 2 | | 2 |
| Subcapsular, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ .. Tissue examined microscopically
X .. Lesion present
I .. Insufficient tissue
M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically
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TDMS No. 20009 - 04
 Test Type: CHRONIC
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
312.5 mg/l | DAY ON TEST | 0732 | 0642 | 0772 | 0753 | 0773 | 0773 | 0773 | 0758 | 0763 | 0773 | 0773 | 0575 | 0773 | 0773 | 0676 | 0776 | 0676 | 0575 | 0466 | 0773 | 0473 | 0747 | 0747 | ANIMAL ID | males
(cont...) | |
|----------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--------------------|-------|
| | 00051 | 00052 | 00053 | 00054 | 00055 | 00056 | 00057 | 00058 | 00059 | 00060 | 00061 | 00062 | 00063 | 00064 | 00065 | 00066 | 00067 | 00068 | 00069 | 00070 | 00071 | 00072 | 00073 | 00074 | | | 00075 |
| Adrenal Medulla Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | | |
| Islets, Pancreatic Hyperplasia | | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | | |
| Parathyroid Gland | | + | M | M | + | + | + | M | + | + | + | + | + | M | M | + | + | + | + | M | M | + | + | + | M | | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis Granuloma Sperm | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Preputial Gland Inflammation, Chronic Active | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Prostate Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Seminal Vesicle Inflammation, Chronic Active | | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------|
| B6C3F1 MICE MALE | DAY ON TEST | 0732 | 0642 | 0732 | 0753 | 0773 | 0773 | 0773 | 0753 | 0776 | 0777 | 0773 | 0773 | 0575 | 0777 | 0776 | 0676 | 0766 | 0554 | 0666 | 0774 | 0747 | 0747 | 0730 | 0730 | males
(cont...) |
| | 312.5 mg/l | ANIMAL ID | 0051 | 0052 | 0053 | 0054 | 0055 | 0056 | 0057 | 0058 | 0059 | 0060 | 0061 | 0062 | 0063 | 0064 | 0065 | 0066 | 0067 | 0068 | 0069 | 0070 | 0071 | 0072 | 0073 | |

Atrophy
 Interstitial Cell, Hyperplasia 2
2

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + |
| Spleen
Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + |
| Thymus | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | M | + | + | + | + | + | + | + | + |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Skin
Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically
 1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B6C3F1 MICE MALE | 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 | |
| | ANIMAL ID | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 6 | 5 | 4 | 6 | 7 | 4 | 7 | 4 | 7 | 3 | 3 | 3 | 3 | 3 | |
| 312.5 mg/l | | 3 | 4 | 3 | 1 | 9 | 3 | 3 | 3 | 8 | 3 | 2 | 3 | 3 | 8 | 3 | 3 | 9 | 3 | 0 | 4 | 7 | 3 | 3 | 0 | 3 | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 2 | 2 | 2 | 5 | 3 | 2 | 1 | 2 | 3 | 2 | 7 | 1 | 0 | 0 | 1 | 2 | 0 | 1 | 5 | 5 | 0 | 8 | 2 | 7 | 0 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | | | | | | | | | |
| | | males (cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hemorrhage

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | 1 | | | 2 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Inflammation, Suppurative | | | | 1 | | | | | | | | | 1 | | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Eye | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | A | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | | |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

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

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
312.5 mg/l | DAY ON TEST | 0732 | 0642 | 0732 | 0775 | 0777 | 0777 | 0777 | 0757 | 0776 | 0777 | 0777 | 0757 | 0777 | 0777 | 0767 | 0776 | 0755 | 0746 | 0767 | 0747 | 0774 | 0777 | ANIMAL ID | males
(cont...) | |
|--------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|---|
| | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nephropathy | | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 1 | | 3 | 3 | 2 | 1 | 2 | 2 | | 1 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tubule, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | | |
| Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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 M .. Missing tissue
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TDMS No. 20009 - 04
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 beta-Picoline
 CAS Number: 108-99-6

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 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE

312.5 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|-----|-------|------|------|
| | 0732 | 0733 | 0731 | 0732 | 0767 | 0772 | 0773 | 0776 | 0777 | 0781 | 0783 | 0784 | 0785 | 0786 | 0787 | 0788 | 0789 | 0790 | 0791 | 0792 | 0793 | 0794 | 0795 | 0796 | 0797 | | | | 0798 | 0799 | 0700 |
| | ANIMAL ID | 00076 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | 00099 | | | | 00100 | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | | | | | |
| Hyperplasia, Squamous Ulcer | | 3 | | | | | | | | 2 | | | | 3 | | | | 1 | | | 3 | | | | | | 4 | 2.3 | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | | | | |
| Mineralization Ulcer | | | | | | | | 1 | | | | | | | | 1 | | | | | | | | | 1 | | 2 | 1.0 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.5 | | | | |
| Tooth Dysplasia | + | + | + | + | + | | + | | + | | + | + | + | | + | + | | + | + | + | + | + | + | + | + | 41 | | 41 | | | |
| X | X | X | X | X | X | | X | | X | | X | X | X | | X | X | | X | X | X | X | X | X | X | X | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|----|-----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Cardiomyopathy | 1 | | | | | | | | | | 1 | | | 1 | 1 | 1 | | | 1 | | | 2 | 1 | 1 | 2 | | 17 | 1.2 |
| Mineralization | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Necrosis | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | 1 | 2.0 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | 1 | 3.0 |
| Hyperplasia | | | | 2 | | 2 | | | 2 | | | | | | 2 | | | | | | | | | | | | 8 | 2.0 |
| Hypertrophy | 2 | | | | | 2 | 2 | | | | 2 | 2 | | | | | | 2 | | | 2 | 2 | | | | | 14 | 2.0 |
| Subcapsular, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | 1 | 2.0 |

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 + .. Tissue examined microscopically
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TDMS No. 20009 - 04
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 beta-Picoline
 CAS Number: 108-99-6

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| B6C3F1 MICE MALE
312.5 mg/l | DAY ON TEST | 0732 | 0733 | 0731 | 0732 | 0767 | 0777 | 0766 | 0777 | 0767 | 0777 | 0755 | 0777 | 0766 | 0777 | 0755 | 0755 | 0777 | 0766 | 0777 | 0777 | 0766 | 0766 | 0777 | * TOTALS | |
|----------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
| | ANIMAL ID | 00076 | 00077 | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097 | 00098 | | 00099 |
| Adrenal Medulla Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | 47 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Islets, Pancreatic Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| | | 3 | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Parathyroid Gland | | + | + | + | + | + | M | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | 39 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis Granuloma Sperm | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Preputial Gland Inflammation, Chronic Active | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 3 3.0 | |
| Prostate Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Seminal Vesicle Inflammation, Chronic Active | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

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

Atrophy
 Interstitial Cell, Hyperplasia

4

2 3.0
 1 2.0

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|----------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | + | A | + | + | 45 | |
| Spleen
Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Thymus | + | + | + | M | + | + | + | + | + | M | + | M | M | A | + | + | + | + | + | + | + | + | + | + | + | + | 42 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 |
| Skin
Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
312.5 mg/l | 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 | * TOTALS | |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | ANIMAL ID | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 5 | 5 | 7 | 6 | 7 | 7 | 6 | 6 | | 7 |
| | | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 8 | 3 | 0 | 2 | 3 | 1 | 9 | 3 | 7 | 2 | 0 | 3 | 3 | 2 | 3 |
| | | 2 | 1 | 1 | 2 | 7 | 2 | 2 | 4 | 1 | 1 | 5 | 2 | 4 | 7 | 2 | 2 | 3 | 2 | 5 | 2 | 2 | 1 | 2 | 1 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 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 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | | 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 |

Hemorrhage 2 1 2.0

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hemorrhage | | | | | | | 1 | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Inflammation, Suppurative | | | | | | | | | | | 4 | | | | | | | | | | | | | | | 1 4.0 |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | 1 | | | | | 1 | | | | 1 | | | | | | | | | | 6 1.2 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Suppurative | | | | | | | | | | | 1 | | | | 1 | | | | | | | | | 1 | | 9 1.1 |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | 2 | | | | | | 1 | | | | | | 1 | | 4 1.3 |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | 1 | | | | 1 | 1 | | 2 | 1 | | | | | | | | | | | | 12 1.1 |
| Respiratory Epithelium, Hyperplasia | | | | | 1 | | | | 1 | 1 | 1 | | | 1 | | | | 1 | | | 2 | 1 | | | | 23 1.3 |
| Pleura | | | | | + | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | A | + | + | + | A | + | 39 |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | 4 | | | 1 4.0 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
312.5 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| | 0732 | 0731 | 0772 | 0773 | 0762 | 0777 | 0777 | 0766 | 0777 | 0777 | 0755 | 0777 | 0777 | 0766 | 0777 | 0755 | 0755 | 0777 | 0766 | 0777 | 0777 | 0766 | 0766 | 0777 | |
| ANIMAL ID | 0076 | 0077 | 0078 | 0079 | 0080 | 0081 | 0082 | 0083 | 0084 | 0085 | 0086 | 0087 | 0088 | 0089 | 0090 | 0091 | 0092 | 0093 | 0094 | 0095 | 0096 | 0097 | 0098 | 0099 | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Infarct | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | 4 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Nephropathy | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 2 | 2 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 49 1.9 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Renal Tubule, Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | 3 2.3 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 45 |
| 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
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
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 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|
| B6C3F1 MICE MALE | DAY ON TEST | 0
5
5
1 | 0
7
3
1 | 0
7
3
2 | 0
5
4
8 | 0
6
9
4 | 0
5
6
9 | 0
7
3
2 | 0
4
5
6 | 0
7
3
5 | 0
7
3
3 | 0
7
3
3 | 0
7
3
3 | 0
5
6
0 | 0
5
5
6 | 0
7
3
2 | 0
7
3
0 | 0
7
3
3 | 0
7
3
3 | 0
6
2
8 | 0
5
2
4 | 0
4
7
0 | 0
7
3
1 | males
(cont...) | |
| | ANIMAL ID | 0
0
1
0
1 | 0
0
1
0
2 | 0
0
1
0
3 | 0
0
1
0
4 | 0
0
1
0
5 | 0
0
1
0
6 | 0
0
1
0
7 | 0
0
1
0
8 | 0
0
1
0
9 | 0
0
1
1
0 | 0
0
1
1
1 | 0
0
1
1
2 | 0
0
1
1
3 | 0
0
1
1
4 | 0
0
1
1
5 | 0
0
1
1
6 | 0
0
1
1
7 | 0
0
1
1
8 | 0
0
1
1
9 | 0
0
1
2
0 | 0
0
1
2
1 | 0
0
1
2
2 | | 0
0
1
2
3 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Gallbladder
Inflammation, Chronic Active | A | + | + | + | A | A | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | + | + | |
| Intestine Large, Cecum | + | + | + | A | A | A | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | + | + | |
| Intestine Large, Colon | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | A | + | + | A | A | A | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | A | A | + | + |
| Intestine Small, Ileum | A | + | + | + | A | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | A | + | + | A | A | A | + | + | + | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | X | | X | | | | X | | | | | | X | X | | | | |
| Clear Cell Focus | X | | | | | | | | | | | X | X | | | X | X | | | | X | X | | | |
| Eosinophilic Focus | | X | | | | X | | | | X | | X | | X | X | | | | X | X | | | | | |
| Inflammation, Chronic | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Mixed Cell Focus | | | | X | | | | | | | | | | X | | | | | | | | X | | | |
| Necrosis | 2 | | | | 3 | | | | | | | | | | | | | | | | | | 3 | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | |

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TDMS No. 20009 - 04
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 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE | 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 | males
(cont...) |
|-----------------------------------------------------------------------|--------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------------|
| | | 5 | 7 | 7 | 5 | 6 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 7 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 4 | 7 | |
| 625 mg/l | ANIMAL ID | 5 | 3 | 3 | 4 | 9 | 6 | 3 | 5 | 3 | 3 | 3 | 3 | 6 | 5 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 2 | 7 | 3 | |
| | | 1 | 1 | 2 | 8 | 4 | 9 | 2 | 6 | 2 | 1 | 2 | 1 | 0 | 0 | 6 | 2 | 0 | 0 | 1 | 0 | 1 | 8 | 4 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Adrenal Medulla
Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Islets, Pancreatic
Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | 2 | + | + | + | + | + | + | + | + | + | + | + | + | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | + | + | + | M | |
| Pituitary Gland
Pars Distalis, Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| GENERAL BODY SYSTEM | | NONE | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Preputial Gland
Inflammation, Chronic Active | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 | + | + | + | + | 3 | + | + | |
| Prostate
Inflammation, Suppurative
Inflammation, Chronic Active | | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 3 | + | + | 3 | + | |
| Seminal Vesicle
Amyloid Deposition | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

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 2) Mild 4) Marked

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
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 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------|
| B6C3F1 MICE MALE
625 mg/l | DAY ON TEST | 051 | 073 | 073 | 054 | 069 | 056 | 073 | 045 | 072 | 073 | 073 | 073 | 056 | 055 | 073 | 077 | 077 | 077 | 062 | 055 | 044 | 073 | 054 | 073 | males
(cont...) |
| | ANIMAL ID | 001 | 001 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |

NERVOUS SYSTEM

Brain + + + + + + + + + + + + + + + + + + + + + + + + + +

RESPIRATORY SYSTEM

Lung + + + + + + + + + + + + + + + + + + + + + + + + + +

Thrombosis 2
 Alveolar Epithelium, Hyperplasia 4 2
 Alveolus, Infiltration Cellular, Histiocyte 4 2
 Bronchiole, Hyperplasia 2

Nose + + + + + + + + + + + + + + + + + + + + + + + + + +

Inflammation, Suppurative 1 1 1
 Olfactory Epithelium, Atrophy 1 2 2
 Olfactory Epithelium, Metaplasia, Respiratory 1 2 2 2 1 1 1 1 2 2 2 1 1
 Respiratory Epithelium, Hyperplasia 2 1 1 2 1 2 1 1 1 1 1 1 1 2 1 1

Trachea + + + + + + + + + + + + + A + + + + + + + A + + +

SPECIAL SENSES SYSTEM

Eye + + + + A A + + + + + + + A + + + + + + + + + + + +

Degeneration 4
 Cornea, Inflammation, Chronic Active 2
 Retina, Hemorrhage, Chronic

Harderian Gland + + + + A + + + + + + + + A + + + + + + + + + + + +

Inflammation, Chronic

* .. 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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B6C3F1 MICE MALE | 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 | | | | | |
| | | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | 6 | 5 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| | | 3 | 6 | 3 | 1 | 3 | 1 | 0 | 7 | 3 | 3 | 3 | 9 | 3 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 625 mg/l | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------|-------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|--------------|
| Esophagus | + + + + + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Gallbladder
Inflammation, Chronic Active | + A + A + + A + + + + A + + + + + + + + + + + + + + A + | | | | | | | | | | | | | | | | | | | | | | | | | | | | 39 | 1 3.0 |
| Intestine Large, Cecum | + A + A + A A A + + + A + + + + + + + + + + + + A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 | |
| Intestine Large, Colon | + A + A + + A A + + + A + + + + + + + + + + + + A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 41 | |
| Intestine Large, Rectum | + A + A + + A A + + + A + + + + + + + + + + + + A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 42 | |
| Intestine Small, Duodenum | + A + A + + A A + + + A + + + + + + + + + + + + A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 35 | |
| Intestine Small, Ileum | + A + A + + A A + + + A + + + + + + + + + + + + A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 39 | |
| Intestine Small, Jejunum | + A + A + + A A + + + A + + + + + + + + + + + + A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 37 | |
| Liver | + + + + + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.0 |
| Basophilic Focus | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15 |
| Clear Cell Focus | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 16 |
| Eosinophilic Focus | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| Inflammation, Chronic | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mixed Cell Focus | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Necrosis | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 2.7 |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|--------------------------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----------------|
| | 0731 | 0661 | 0771 | 0773 | 0775 | 0777 | 0776 | 0777 | 0777 | 0777 | 0774 | 0777 | 0776 | 0777 | 0777 | 0777 | 0777 | 0777 | 0776 | 0777 | 0777 | 0776 | 0775 | 0776 | | |
| ANIMAL ID | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | 001 | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |
| Pancreas | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach
Hyperplasia, Squamous
Ulcer | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | 3 2.7
4 3.0 |
| Stomach, Glandular
Necrosis | + | A | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | 1 1.0 |
| Tooth
Dysplasia | + | + | + | | + | + | + | | + | + | | + | + | + | + | + | | + | + | + | + | | + | 42 | | |
| | X | X | X | | X | X | X | | X | X | | X | X | X | X | X | | X | X | X | X | | X | 42 | | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | | 1 | | | | | 1 | | 1 | | | | | | 1 | | | | | 1 | | | | 7 | 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | 2 | | 2 | | | 2 | 2 | | | | | | | | | | | | 2 | | | | 10 | 2.0 |
| Hypertrophy | | | 2 | | 2 | | | | | 2 | 3 | | | 2 | | | 2 | 2 | | | | | | | 14 | 2.1 |

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|----------|
| | 0731 | 0661 | 0763 | 0771 | 0773 | 0571 | 0770 | 0670 | 0772 | 0773 | 0773 | 0479 | 0773 | 0675 | 0773 | 0773 | 0773 | 0773 | 0773 | 0676 | 0773 | 0676 | 0575 | 0676 | | |
| ANIMAL ID | 00126 | 00017 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | 00011 | | |
| Adrenal Medulla Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
1 2.0 | |
| Islets, Pancreatic Hyperplasia | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 48
2 2.0 | |
| Parathyroid Gland | + | + | + | + | + | + | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + | M | + | + | 44 | |
| Pituitary Gland Pars Distalis, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 49
2 2.5 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Preputial Gland Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50
4 3.5 | |
| Prostate Inflammation, Suppurative | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48
2 3.0 | |
| Prostate Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 48
1 2.0 | |
| Seminal Vesicle Amyloid Deposition | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49
2 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
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TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
| | 0
7
3
1 | 0
6
6
1 | 0
7
3
1 | 0
7
1
5 | 0
7
3
2 | 0
5
1
9 | 0
7
0
7 | 0
6
7
0 | 0
7
3
2 | 0
7
3
1 | 0
7
3
1 | 0
4
9
6 | 0
7
3
1 | 0
6
5
9 | 0
7
3
2 | 0
7
3
1 | 0
7
3
2 | 0
6
0
4 | 0
7
3
1 | 0
7
3
2 | 0
6
3
0 | 0
7
3
3 | 0
6
2
7 | 0
5
2
6 | 0
6
8
5 | |
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0
0
1
2
6 | 0
0
1
2
7 | 0
0
1
2
8 | 0
0
1
2
9 | 0
0
1
3
0 | 0
0
1
3
1 | 0
0
1
3
2 | 0
0
1
3
3 | 0
0
1
3
4 | 0
0
1
3
5 | 0
0
1
3
6 | 0
0
1
3
7 | 0
0
1
3
8 | 0
0
1
3
9 | 0
0
1
4
0 | 0
0
1
4
1 | 0
0
1
4
2 | 0
0
1
4
3 | 0
0
1
4
4 | 0
0
1
4
5 | 0
0
1
4
6 | 0
0
1
4
7 | 0
0
1
4
8 | 0
0
1
4
9 | 0
0
1
5
0 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 3.3 |
| Testes | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.5 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | | | | | | | | | | | | | | | | | | | | | | | | 48 | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Lymph Node, Mandibular | + | | | | | | | | | | | | | | | | | | | | | | | | 49 | |
| Infiltration Cellular, Plasma Cell | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Lymph Node, Mesenteric | + | | | | | | | | | | | | | | | | | | | | | | | | 43 | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Spleen | + | | | | | | | | | | | | | | | | | | | | | | | | 47 | |
| Thymus | + | | | | | | | | | | | | | | | | | | | | | | | | 48 | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | M | | | | | | | | | | | | | | | | | | | | | | | | 0 | |
| Skin | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | | | | | | | | | | | | | | | | | | | | | | | | 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

TDMS No. 20009 - 04
Test Type: CHRONIC
Route: DOSED WATER
Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
beta-Picoline
CAS Number: 108-99-6

Date Report Requested: 05/27/2011
Time Report Requested: 09:52:36
First Dose M/F: 11/09/04 / 11/08/04
Lab: BAT

| B6C3F1 MICE MALE
625 mg/l | 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 | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------|-------------------------------------------------|---------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|
| | | 7 6 7 7 5 7 6 7 7 7 4 7 6 7 7 7 7 7 6 7 7 6 5 6 | 3 6 3 1 3 1 0 7 3 3 3 9 3 5 3 3 3 3 0 3 3 3 2 2 8 | 1 1 1 5 2 9 7 0 2 1 1 6 1 9 2 2 1 2 4 1 2 0 7 6 5 6 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | | | | | | |
| | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 | 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 | | | | | | | | | | | | | | | | | | | |
| | 2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 | 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 | 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 4 4 4 4 4 4 4 4 4 4 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 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 5 5 5 5 5 5 5 5 5 5 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 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 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

Brain + + + + + + + + + + + + + + + + + + + + + + + + + 50

RESPIRATORY SYSTEM

Lung + + + + + + + + + + + + + + + + + + + + + + + + + 50
Thrombosis 1 2.0
Alveolar Epithelium, Hyperplasia 3 2 3 2 6 2.7
Alveolus, Infiltration Cellular, Histiocyte 2 3 2.7
Bronchiole, Hyperplasia 1 2.0

Nose + + + + + + + + + + + + + + + + + + + + + + + + + 50
Inflammation, Suppurative 1 1 9 1.0
Olfactory Epithelium, Atrophy 2 2 1 8 1.5
Olfactory Epithelium, Metaplasia, Respiratory 1 1 1 2 2 1 1 2 30 1.3
Respiratory Epithelium, Hyperplasia 3 1 1 1 1 2 1 1 23 1.3

Trachea + A + A + + + + + + + A + + + + + + + + + + + + + 45

SPECIAL SENSES SYSTEM

Eye + A + A + + + + + + + A + + + + + + + + + + + A + 43
Degeneration 1 4.0
Cornea, Inflammation, Chronic Active 1 2.0
Retina, Hemorrhage, Chronic 3 1 3.0

Harderian Gland + A + A + + + + + + + + + + + + + + + + + + + 46
Inflammation, Chronic 3 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
625 mg/l | 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 | * TOTALS |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | ANIMAL ID | 7 | 6 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 5 | |
| | | 3 | 6 | 3 | 1 | 3 | 1 | 0 | 7 | 3 | 3 | 3 | 9 | 3 | 5 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 2 | 2 | 8 |
| | | 1 | 1 | 1 | 5 | 2 | 9 | 7 | 0 | 2 | 1 | 1 | 6 | 1 | 9 | 2 | 2 | 1 | 2 | 4 | 1 | 2 | 0 | 7 | 6 | 5 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|--------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | |
| Amyloid Deposition | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Infarct | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 |
| Metaplasia, Osseous | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | 2 2.0 |
| Nephropathy | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 1 | 2 | 3 | 2 | 2 | 49 | 2.2 | |
| Artery, Inflammation, Chronic Active | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | 1 3.0 |
| Renal Tubule, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Urethra | | | | | | | | + | | | | | + | | | | | | | | | | | | | 5 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | 3 2.3 |
| Urinary Bladder | + | A | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 1.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

| B6C3F1 MICE MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | males
(cont...) |
|------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
| | 0730 | 0732 | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | 0751 | 0752 | 0753 | 0754 | |
| 1250 mg/l | 00151 | 00152 | 00153 | 00154 | 00155 | 00156 | 00157 | 00158 | 00159 | 00160 | 00161 | 00162 | 00163 | 00164 | 00165 | 00166 | 00167 | 00168 | 00169 | 00170 | 00171 | 00172 | 00173 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Gallbladder | + | + | + | + | + | + | + | + | + | M | A | + | + | A | A | + | + | A | + | + | + | + | A | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | A | A |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | A | A |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | A | A | + | + | A | + | + | + | A | + | + | + | + | A | A |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | A | A |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | A | A |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | A | A |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | 4 | 2 | |
| Basophilic Focus | | | | | | X | | | | X | | | | | | | | X | | | | | X | |
| Clear Cell Focus | | | | | X | | X | | | | | | | | | | | | | | | | | |
| Congestion | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyst | | | | | 2 | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | X | | | | | | X | | | X | | | | X | X | X | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Chronic Active | | | | | 1 | | | 1 | | | | | | | | | | | | | | | | |
| Mixed Cell Focus | | | | | | | | | | | | | | | | | | X | | | | | X | |
| Necrosis | | | | | | | | | | | | | 4 | | | | | | | | | | | |

Mesentery +

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|
| B6C3F1 MICE MALE
1250 mg/l | DAY ON TEST | 07030 | 07332 | 05344 | 07325 | 07432 | 07731 | 07730 | 07733 | 07733 | 07175 | 06731 | 05734 | 06577 | 05722 | 07331 | 07730 | 07731 | 07732 | 07733 | 07733 | 07390 | 05675 | males
(cont...) | |
| | ANIMAL ID | 00151 | 00152 | 00053 | 00054 | 00055 | 00056 | 00057 | 00058 | 00059 | 00060 | 00061 | 00062 | 00063 | 00064 | 00065 | 00066 | 00067 | 00068 | 00069 | 00070 | 00071 | 00072 | | 00073 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Parathyroid Gland | M | + | + | + | M | M | + | + | + | + | M | M | M | + | M | + | M | + | M | + | + | M | M | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Granuloma Sperm Mineralization | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | 3 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 2 | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|
| B6C3F1 MICE MALE | DAY ON TEST | 0730 | 0732 | 0734 | 0735 | 0736 | 0737 | 0737 | 0737 | 0737 | 0737 | 0737 | 0736 | 0737 | 0735 | 0736 | 0735 | 0737 | 0737 | 0737 | 0737 | 0737 | 0737 | 0736 | 0735 | males
(cont...) |
| | ANIMAL ID | 00151 | 00152 | 00153 | 00154 | 00155 | 00156 | 00157 | 00158 | 00159 | 00160 | 00161 | 00162 | 00163 | 00164 | 00165 | 00166 | 00167 | 00168 | 00169 | 00170 | 00171 | 00172 | 00173 | 00174 | |

Mineralization

2

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | + | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node, Mesenteric
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | A | + | + | + | M | + | + | + | A | + | + | + | + | A | + | | |
| Spleen | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | | |
| Thymus | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | | | |
|------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
| | 0730 | 0733 | 0735 | 0737 | 0744 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0766 | 0777 | 0755 | 0766 | 0755 | 0777 | 0777 | 0777 | 0777 | | | 0777 | 0777 | 0766 |
| 1250 mg/l | 0015 | 0012 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 | 0006 | 0007 | 0008 | 0009 | 0000 | 0001 | 0002 | 0003 | 0004 | 0005 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thrombosis | | | | | | | | | | | | | | | 1 | | | | | | | | 1 | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | 2 | 2 | | | | | | | 2 | | | | 1 | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | 1 | | | | | | | | | | | 1 | | | 2 | | 2 | | | | | | |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | 1 | | 2 | | | | | | | | | | | |
| Olfactory Epithelium, Metaplasia, Respiratory | | 2 | 2 | | 1 | 2 | 1 | 1 | | 1 | 1 | 2 | 1 | | | 3 | 2 | 2 | | 3 | 1 | 2 | 1 | 1 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | 1 | | | 2 | | 1 | | | 1 | | | | | | 1 | |
| Pleura | | | | | | | | | | | | | | | + | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | A | A | + | + | A | A | + | + | A | + | + | + | + | + | A | A |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + |
| Hyperplasia | | 2 | | | | | 1 | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hydronephrosis | | | | | | | | | | | | | | | | 3 | | | | | | | | | 2 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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TDMS No. 20009 - 04
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
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 Lab: BAT

| B6C3F1 MICE MALE | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | males
(cont...) | | | |
|----------------------------|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------------|---|---|---|
| 1250 mg/l | | 0 | 0 | 0 | 0 | 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 | 5 | 7 | 4 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | | | | |
| | | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 1 | 7 | 3 | 3 | 8 | 2 | 3 | 3 | 0 | 3 | 1 | 3 | 3 | 3 | 3 | 9 | 7 | | | | |
| | | 0 | 2 | 4 | 2 | 5 | 2 | 1 | 0 | 0 | 5 | 5 | 1 | 4 | 7 | 2 | 1 | 2 | 9 | 1 | 0 | 2 | 1 | 2 | 0 | 1 | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 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 | | | | | |
| Metaplasia, Osseous | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Nephropathy | | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 3 | 2 | | | | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | |
| Renal Tubule, Pigmentation | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | |
| Urethra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | A | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
1250 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|--------------------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|----------------|-------|
| | 0732 | 0733 | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | 0751 | 0752 | 0753 | 0754 | 0755 | | 0756 | 0757 | 0758 | 0759 | 0760 |
| ANIMAL ID | 00176 | 00177 | 00178 | 00179 | 00180 | 00181 | 00182 | 00183 | 00184 | 00185 | 00186 | 00187 | 00188 | 00189 | 00190 | 00191 | 00192 | 00193 | 00194 | 00195 | 00196 | 00197 | 00198 | 00199 | 00200 | 00201 | 00202 | 00203 | 00204 | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Pancreas
Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | 1 2.0 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach
Hyperplasia, Squamous
Ulcer | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | 1 4.0
1 2.0 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | | |
| Tooth
Dysplasia | + | + | + | + | | | + | + | | | + | + | | + | + | + | + | + | | + | + | + | + | + | + | + | + | 41 | 41 | |
| | X | X | X | X | | | X | X | | | X | X | | X | X | X | X | X | | X | X | X | X | X | X | X | X | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------------------------|
| Heart
Cardiomyopathy
Mineralization
Artery, Inflammation, Chronic Active | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 4 1.3
1 1.0
2 3.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------------|
| Adrenal Cortex
Hyperplasia
Hypertrophy | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 5 2.2
17 1.9 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
1250 mg/l | 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 | * TOTALS |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------|
| | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 3 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 2 | 3 | 4 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | 0 | 1 | 9 | 0 | 0 | 1 | 2 | 4 | 2 | 7 | 2 | 2 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Parathyroid Gland | | + | M | + | + | + | + | + | M | + | M | M | M | + | + | + | M | M | + | M | + | + | + | 31 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|--|
| Epididymis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Granuloma Sperm Mineralization | | | | | | | | 1 | | | | | | | | | | | 2 | | | | | 2 1.5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Preputial Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 | |
| Prostate | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | |
| Seminal Vesicle | | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
1250 mg/l | 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 | * TOTALS |
|----------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|---|----------|
| | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 3 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | |
| | | 2 | 3 | 4 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | 0 | 1 | 9 | 1 | 0 | 0 | 1 | 2 | 4 | 2 | 7 | 2 | 2 | 1 | 1 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 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 | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Lymph Node, Mandibular | | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| Lymph Node, Mesenteric Hyperplasia, Lymphoid | | + | | | | | | | | | | | | | | | | | | | | | | | | 45 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | |
| Spleen | | + | | | | | | | | | | | | | | | | | | | | | | | | 46 | | |
| Thymus | | + | | | | | | | | | | | | | | | | | | | | | | | | 47 | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | M | | | | | | | | | | | | | | | | | | | | | | | | 0 | | |
| Skin | | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | | | | | | | | | | | | | | | | | | | | | | | | 50 | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
1250 mg/l | 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 | * TOTALS | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | | 7 |
| | | 3 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | |
| | | 2 | 3 | 4 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | 0 | 1 | 9 | 1 | 0 | 0 | 1 | 2 | 4 | 2 | 7 | 2 | 2 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|---------------|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | 1 | | | | | 3 | | | | 1 | | 7 1.7 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | 3 | 2 | | | | | | | | | 2 2.5 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Inflammation, Suppurative | | | | | | 2 | | | | | | | | | | | 2 | | | | | | | | | 6 1.7 |
| Olfactory Epithelium, Atrophy | | | | | | | 2 | 1 | | | | | | | | 1 | | | | 2 | | 2 | | | | 7 1.6 |
| Olfactory Epithelium, Metaplasia, Respiratory | 2 | 2 | 2 | 2 | | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 3 | | 2 | 2 | 2 | 2 | 2 | | 41 1.7 |
| Respiratory Epithelium, Hyperplasia | | 2 | | | 1 | 2 | | | | | | 1 | 2 | 1 | 1 | 3 | | | 3 | | 3 | 2 | 1 | | | 17 1.6 |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 49 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Eye | + | A | + | + | + | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Degeneration | | | | | | | | | | | | | | | | 4 | | | | | | | | | | 1 4.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | 3 | | | | | | | 1 3.0 |
| Harderian Gland | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 47 |
| Hyperplasia | | | 2 | | | | | | | 1 | | | | | | | | | | | | | | | | 4 1.5 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | | 2 2.5 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE MALE
1250 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | |
|--------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----|-----|-----|
| | 0732 | 0733 | 0734 | 0730 | 0731 | 0732 | 0733 | 0734 | 0735 | 0736 | 0737 | 0738 | 0739 | 0740 | 0741 | 0742 | 0743 | 0744 | 0745 | 0746 | 0747 | 0748 | 0749 | 0750 | | | | | |
| ANIMAL ID | 00176 | 00177 | 00178 | 00179 | 00180 | 00181 | 00182 | 00183 | 00184 | 00185 | 00186 | 00187 | 00188 | 00189 | 00190 | 00191 | 00192 | 00193 | 00194 | 00195 | 00196 | 00197 | 00198 | 00199 | 00200 | | | | |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1.0 | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Nephropathy | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 1 | 2 | 2 | 2 | 49 | 2.1 | | |
| Papilla, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 3.0 | |
| Renal Tubule, Pigmentation | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Urethra
Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 | 2.0 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 46 | | | |

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
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1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------------|---|---|
| B6C3F1 MICE FEMALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 |
| 0 mg/l | | 3 | 3 | 7 | 8 | 2 | 7 | 9 | 3 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 3 | 6 | 2 | 3 | 3 | 6 | 3 | 6 | 3 |
| | ANIMAL ID | 1 | 1 | 2 | 0 | 9 | 4 | 8 | 1 | 9 | 0 | 1 | 6 | 1 | 7 | 0 | 9 | 0 | 1 | 8 | 9 | 0 | 0 | 9 | 1 | 2 | 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 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 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 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Gallbladder | + | + | A | + | + | A | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | A | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | A | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | A | + | + | A | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | A | + | + | A | A | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | A | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | A | + | + | A | + | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | 3 | | | | | | | | | | | | | | | |
| Basophilic Focus | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | X | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Necrosis | | | | | 4 | 4 | | | | | | | | | | | | | | | X | | X | | | |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| B6C3F1 MICE FEMALE

0 mg/l | DAY ON TEST | 0731 | 0731 | 0732 | 0738 | 0732 | 0734 | 0738 | 0731 | 0730 | 0731 | 0732 | 0733 | 0734 | 0737 | 0737 | 0739 | 0730 | 0731 | 0736 | 0737 | 0733 | 0733 | 0736 | 0733 | 0731 | 0732 | 0739 | |
| | ANIMAL ID | 0020 | 0022 | 0023 | 0024 | 0025 | 0026 | 0027 | 0028 | 0029 | 0030 | 0031 | 0032 | 0033 | 0034 | 0035 | 0036 | 0037 | 0038 | 0039 | 0040 | 0041 | 0042 | 0043 | 0044 | 0045 | 0046 | 0047 | 0048 |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

females
(cont...)

Duct, Cyst

Salivary Glands
Necrosis

Stomach, Forestomach

Stomach, Glandular
Mineralization

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| + | + | A | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

CARDIOVASCULAR SYSTEM

Blood Vessel
Mineralization

Heart
Cardiomyopathy
Inflammation, Suppurative
Mineralization
Thrombosis

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
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| | | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

Adrenal Cortex
Hyperplasia
Hypertrophy

Adrenal Medulla

Islets, Pancreatic

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | |
| + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
0 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | |
|------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------------------|---|
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7 | 0
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0 | 0
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9 | 0
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1 | 0
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2 | 0
7
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9 | | | |
| Parathyroid Gland | M | + | A | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | M | + | + | + | + | 0
0
2
0
1 | 2 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
2
0
1 | 2 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |
| Pars Distalis, Hyperplasia | 2 | | | | 2 | | | | 2 | | | | | | | | | | 2 | 2 | | | | | | | 0
0
2
0
1 | 2 |
| Thyroid Gland | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 0
0
2
0
1 | 2 | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------------|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
2
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1 | 2 |
| Ovary | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
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0
1 | 2 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |
| Uterus | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
2
0
1 | 2 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |
| Endometrium, Hyperplasia, Cystic | | | | | 1 | | 4 | 4 | | 2 | 3 | 3 | 4 | | 2 | 4 | 2 | 4 | 1 | | 4 | 3 | | 1 | 3 | 0
0
2
0
1 | 2 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------------|---|
| Bone Marrow | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
2
0
1 | 2 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |
| Lumbar, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 2 |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 0
0
2
0
1 | 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. 20009 - 04
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 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|----------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 mg/l | 7 | 7 | 3 | 6 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | |
| | 3 | 3 | 7 | 8 | 2 | 7 | 9 | 3 | 2 | 3 | 3 | 2 | 3 | 4 | 3 | 2 | 3 | 3 | 6 | 2 | 3 | 3 | 6 | 3 | 2 | |
| | 1 | 1 | 2 | 0 | 9 | 4 | 8 | 1 | 9 | 0 | 1 | 6 | 1 | 7 | 0 | 9 | 0 | 1 | 8 | 9 | 0 | 0 | 9 | 1 | 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 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 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 | | |
| Pancreatic, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Lymph Node, Mesenteric | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Spleen | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | | |
| Hematopoietic Cell Proliferation | | | | | 2 | 4 | 3 | | | | | | | | | | | | | | | | | | | |
| Thymus | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | 2 | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Peripheral Nerve | | | | | + | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
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 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | females
(cont...) |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|
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| 0 mg/l | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
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Spinal Cord +

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|-----------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Lung | + + + + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + + A + + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | |
| Olfactory Epithelium, Metaplasia, Respiratory | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Epithelium, Hyperplasia | 1 1 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + + A + + + + + + + + + + + A + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Eye | + + A + + A A + + + + A + A + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Cataract | | | | | | | | | | | | | | | | | | | | | | | | | |
| Degeneration | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + + A + + A + + + + + + + A + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kidney | + + A + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
0 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| | 0643 | 0682 | 0731 | 0779 | 0779 | 0771 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | |
| ANIMAL ID | 0022 | 0022 | 0022 | 0022 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | |
| Gallbladder | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 43 | | |
| Intestine Large, Cecum | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 44 | | |
| Intestine Large, Colon | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 44 | | |
| Intestine Large, Rectum | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 43 | | |
| Intestine Small, Duodenum | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 42 | | |
| Intestine Small, Ileum | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 44 | | |
| Intestine Small, Jejunum | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 43 | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Angiectasis | | | | | | | | | | 3 | | | | | 4 | | | | | | | | | | | | 3 | 3.3 | |
| Basophilic Focus | | | | | | X | | | | | | | X | | | | | | | X | | | | | | | 4 | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | X | | | | | 3 | | |
| Eosinophilic Focus | | | X | | X | X | | | | | | X | | | X | | X | | X | | | | | | | | 11 | | |
| Necrosis | | | | | | | | | | | | | | | 1 | | | | | | | | | | 2 | | 4 | 2.8 | |
| Tension Lipidosis | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | 1 | 2.0 | |
| Mesentery | + | | | | | | + | | + | | | | | | | | | | | | | + | | | | | 8 | | |
| Fat, Necrosis | 2 | | | | | | 2 | | 2 | | | | | | | | | | | | | 2 | | 2 | | | 7 | 2.0 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Atrophy | | | | | | | | | | | | | | | 4 | | | | | | | 2 | | | | | | 2 | 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|-----------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|-----|-----|--|
| | 0643 | 0648 | 0673 | 0672 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | | | | | |
| 0 mg/l | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
| | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | 0022 | | 0022 | | | |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 1 | 4.0 | | |
| Salivary Glands Necrosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 4.0 | |
| Stomach, Forestomach | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | | | | |
| Stomach, Glandular Mineralization | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | 2 | 2.0 | | |
| CARDIOVASCULAR SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Blood Vessel Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | | | | |
| Cardiomyopathy | | | | | | | | | | | 1 | | 1 | | | | | | | | | | | 1 | 4 | 1.0 | | | |
| Inflammation, Suppurative | | | 3 | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | 3 | | 1 | 3.0 | | | |
| Thrombosis | | | 2 | | | | | | | | | | | | | | | | | | | | | | 2 | 3.0 | | | |
| ENDOCRINE SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | | | |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.0 | | | |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | 3 | | 1 | 3.0 | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | | |

* .. 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
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 beta-Picoline
 CAS Number: 108-99-6

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 Lab: BAT

| B6C3F1 MICE FEMALE
0 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------------|------------|
| | 0643 | 0682 | 0731 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | 0779 | | | |
| ANIMAL ID | 0022 | 0022 | 0022 | 0022 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | | | |
| Parathyroid Gland | + | + | + | + | + | M | M | + | + | M | + | + | + | + | M | + | M | M | + | + | M | + | + | + | + | 38 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | 4 | 1 | | | | | | | | | | | 3 | 2.3 | |
| Pars Distalis, Hyperplasia | | | | | | | | | | 2 | | | | | | | | | | | | | 2 | | 8 | 2.0 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Follicular Cell, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Cyst | | | | | | | | | | 2 | | | | | | | | 3 | | | | | 2 | | | 5 | 2.2 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Thrombosis | | | 3 | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Endometrium, Hyperplasia, Cystic | | | | 1 | 3 | | 4 | 3 | 4 | 4 | 3 | | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | | 3 | | 4 | 4 | 33 | 3.2 |
| HEMATOPOIETIC SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | |
| Lumbar, Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
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TDMS No. 20009 - 04
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
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 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|----------------------------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|-------|
| | | 0643 | 0682 | 0671 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | 0677 | | |
| 0 mg/l | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| Pancreatic, Ectasia | | | | | | | | | | | | | | | | 4 | | | | | | | | | | 1 4.0 | |
| Renal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | 4 | | | 1 4.0 | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Lymph Node, Mesenteric | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 46 |
| Spleen | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 46 |
| Hematopoietic Cell Proliferation | | | 2 | | | | | | | | | | | | | | | | | | | | | | | 4 2.8 | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | A | + | + | + | + | 45 |
| INTEGUMENTARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| MUSCULOSKELETAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 7 |
| 0 mg/l | ANIMAL ID | 4 | 8 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 9 | 3 | 2 | 3 |
| | | 3 | 2 | 1 | 9 | 9 | 1 | 9 | 0 | 0 | 0 | 9 | 1 | 1 | 0 | 9 | 0 | 1 | 9 | 1 | 8 | 9 | 9 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

*** TOTALS**

Spinal Cord 1

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------------------|--|---|--|---|---|--|--|--|---|--|--|--|--|---|---|--|--|---|---|--|--|--|---|--|-----------|--|-----------|------------|------------|------------|
| Lung | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | 4 | | | | 1 | 4.0 | | |
| Alveolar Epithelium, Hyperplasia | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | 2 | 1.5 | | |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | 2 | | | | | | 2 | | | | | | | | | | | | 2 | 2.0 | | |
| Nose | | | | | | | | | | | | | | | | | | | | | | | | | | | 49 | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 | |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1.0 | |
| Respiratory Epithelium, Hyperplasia | | | | 1 | 1 | | | | | | | | | | | | | 1 | 1 | | | | | | | | | 7 | 1.0 | |
| Trachea | | | | | | | | | | | | | | | | | | | | | | | | | | | | 47 | | |
| Mineralization | | A | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|-----------|-----------|------------|------------|
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 43 | | | |
| Cataract | | A | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Cornea, Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | 1 | 1.0 | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 45 | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 2.4 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|--|--|
| Kidney | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 49 | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----------|--|--|

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|---------------------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|-------|--------|---|----|
| | | 0643 | 0682 | 0731 | 0772 | 0773 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | | 0777 | 0777 | | |
| 0 mg/l | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| | | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | |
| Amyloid Deposition | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 | | | |
| Inflammation, Suppurative | | | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | 3 | | | 1 | 3 2.0 | | | |
| Nephropathy | | 2 | 3 | 1 | | 1 | 1 | 1 | | 1 | | | | 1 | | | 1 | | 3 | | 1 | 4 | 1 | 29 1.4 | | |
| Renal Tubule, Necrosis | | | 2 | | | | | | | | | | | | | | | | 3 | | | | | 2 2.5 | | |
| Urinary Bladder | | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 44 |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | 312.5 mg/l | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ANIMAL ID | females (cont...) | | | |
|--------------------|------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-------------------|---|---|---|
| | | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | | | 7 | 7 | |
| | | 2 | 8 | 8 | 2 | 0 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 3 | 2 | 3 | 0 | 2 | 2 | 3 | 0 | 0 |
| | | 9 | 5 | 8 | 9 | 8 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 9 | 3 | 1 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 2 | 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 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 |
| | | 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 | 0 | 0 |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + |
| Gallbladder | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | + | + | A | + | + | + | + | + | + | M | + |
| Intestine Large, Cecum | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Large, Colon | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Large, Rectum | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Small, Duodenum | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Small, Ileum | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Small, Jejunum | + | A | A | + | A | + | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | + |
| Intestine Small, Jejunum Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

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

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------------|
| B6C3F1 MICE FEMALE | DAY ON TEST | 07 | 06 | 05 | 07 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 05 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | females (cont...) |
| 312.5 mg/l | ANIMAL ID | 29 | 85 | 88 | 29 | 08 | 03 | 23 | 33 | 23 | 33 | 39 | 23 | 53 | 13 | 13 | 08 | 33 | 29 | 03 | 00 | 22 | 23 | 09 | 00 | 00 | 02 | 23 | 30 | |
| | | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | |
| | | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | |
| Fat, Hemorrhage | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
| Fat, Necrosis | | 2 | | | | | | | | 2 | | | | | | | | 2 | | | | | | | | | | | | |
| Pancreas | | + + + + A + + + + + + + + + + A + A + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | females (cont...) |
| Thrombosis | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Cyst | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | | + + + + + + + + + + + + + + + M + M + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | | + A + + + + + + + + + + + + + + + A + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia, Squamous | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | | + A + + A + + + + + + + + + + A A + A + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hyperplasia | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth | | M | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--|-------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel | | + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | 2 | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | |
| Heart | | + + + + + + + + + + + + + + + + + + + + + + + + + + + | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiomyopathy | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | 2 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| Necrosis | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|
| B6C3F1 MICE FEMALE | 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 | females
(cont...) | |
| | | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 312.5 mg/l | 2 | 8 | 8 | 2 | 0 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 3 | 2 | 3 | 0 | 0 | 2 | 2 | 3 | | 0 |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 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 | |

Angiectasis
 Endometrium, Hyperplasia, Cystic

2 3 4 1 3 2 4 3 2 4 1 4 3 4 4 4 2

HEMATOPOIETIC SYSTEM

Bone Marrow

+ + + + A + + + + + + + + + + + + + + + + + +

Lymph Node
 Mediastinal, Hyperplasia, Lymphoid
 Renal, Ectasia

+ + +
 2
 3

Lymph Node, Mandibular

+ A + + + + + + + + + + + + M + A + + + A + + +

Lymph Node, Mesenteric

+ A + + A + + + + + + + A + A A + A + + + A + + +

Spleen
 Hematopoietic Cell Proliferation
 Thrombosis

+ + + + A + + + + + + + A + + A + A + + + + + + +

Thymus

+ + + + A + + + + + + + + + + M + A + + + + + + +

INTEGUMENTARY SYSTEM

Mammary Gland

+ + + + + + + + + + + + + + + + + + A + + +

Skin
 Hyperplasia, Squamous
 Inflammation, Chronic Active

+ + + + + + + + + + + + + + + + + + + + + + + +
 4
 4

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:
 1) Minimal 3) Moderate
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TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|
| B6C3F1 MICE FEMALE | 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 | females
(cont...) | |
| | | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 312.5 mg/l | 2 | 8 | 8 | 2 | 0 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 3 | 2 | 3 | 0 | 2 | 2 | | 3 |
| | 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 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 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 | |

Bone + + + + + + + + + + + + + + + + + + + + + + + + + +

NERVOUS SYSTEM

Brain + + + + + + + + + + + + + + + + M + + + + + + + + + +
 Hemorrhage
 Necrosis

RESPIRATORY SYSTEM

Lung + + + + + + + + + + + + + + + + + + + + + + + + + +
 Inflammation, Chronic Active 2
 Mineralization 3 2
 Alveolar Epithelium, Hyperplasia 3 2 3
 Alveolus, Infiltration Cellular, Histiocyte

Nose + + + + A + + + + + + + + + + M + + + + + + + + + +
 Olfactory Epithelium, Atrophy 1 1
 Olfactory Epithelium, Metaplasia, Respiratory
 Respiratory Epithelium, Hyperplasia 1

Trachea + + A + + + + + + + + + + + + M + A + + + A + + + +
 Mineralization 3

SPECIAL SENSES SYSTEM

Eye + A A + A + + + + + + + + A + A M + A + + + A + + + +
 Cornea, Inflammation, Acute

Harderian Gland + A + + A + + + + + + + + + + M + A + + + A + + + +

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------------------|---|
| B6C3F1 MICE FEMALE

312.5 mg/l | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 7 | 6 | 5 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | |
| | | 2 | 8 | 8 | 2 | 0 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 9 | 2 | 5 | 1 | 3 | 8 | 3 | 2 | 3 | 0 | 2 | | 2 | 3 |
| | | 9 | 5 | 8 | 9 | 8 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 7 | 9 | 3 | 1 | 1 | 0 | 0 | 9 | 0 | 0 | 9 | | 0 | 3 |
| | 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 | females
(cont...) | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |

Hyperplasia

1

3

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Amyloid Deposition | | | | | | | | | | | 2 | | | | | | | | | | | | | | |
| Hydronephrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Metaplasia, Osseous | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | 2 | | | | |
| Nephropathy | | | 1 | 1 | | 1 | | 1 | | 1 | | 3 | | 1 | | | | 2 | | 1 | | | | | |
| Renal Tubule, Necrosis | | 3 | | | | | | | | | | | | | | 3 | | | | | | | | | |
| Urinary Bladder | + | A | A | + | A | + | + | + | + | + | + | A | + | A | A | + | A | + | + | + | A | + | + | + | |

* .. 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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 A .. Autolysis precludes evaluation
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1-4 .. Lesion qualified as:
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TDMS No. 20009 - 04
 Test Type: CHRONIC
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

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 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------|
| B6C3F1 MICE FEMALE | DAY ON TEST | 0
4 | 0
7 | 0
7 | 0
3 | 0
7 | 0
6 | 0
6 | 0
7 | 0
7 | 0
7 | 0
7 | 0
7 | 0
7 | 0
7 | 0
7 | 0
7 | 0
5 | 0
7 | 0
7 | 0
7 | 0
6 | 0
7 | * TOTALS |
| | 312.5 mg/l | 9
4 | 3
0 | 3
1 | 8
2 | 3
0 | 2
8 | 7
2 | 2
9 | 3
0 | 3
0 | 1
1 | 2
9 | 3
0 | 3
0 | 0
4 | 1
8 | 3
1 | 3
3 | 2
4 | 3
0 | 3
0 | 2
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
0 | 0
0 | 0
0 | 0
0 | 0
0 | 0
0 | 0
0 | 0
0 | 0
0 | 0
0 | |
| | | 2
7 | 2
7 | 2
7 | 2
7 | 2
8 | 2
8 | 2
8 | 2
8 | 2
8 | 2
8 | 2
8 | 2
8 | 2
8 | 2
9 | 2
9 | 2
9 | 2
9 | 2
9 | 2
9 | 2
9 | 2
9 | 2
9 | |
| | | 6
7 | 7
8 | 8
9 | 9
0 | 0
1 | 1
2 | 2
3 | 3
4 | 4
5 | 5
6 | 6
7 | 7
8 | 8
9 | 9
0 | 0
1 | 1
2 | 2
3 | 3
4 | 4
5 | 5
6 | 6
7 | 7
8 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Gallbladder | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 36 |
| Intestine Large, Cecum | A | + | + | A | + | + | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 36 |
| Intestine Large, Colon | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 35 |
| Intestine Large, Rectum | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 35 |
| Intestine Small, Duodenum | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 35 |
| Intestine Small, Ileum | A | + | + | A | + | + | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 36 |
| Intestine Small, Jejunum | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 35 |
| Inflammation, Granulomatous | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 3.0 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 3 3.0 |
| Basophilic Focus | | | | | | | | | | | | X | | | | | | | | | | | | | 2 |
| Clear Cell Focus | | | X | | | | | | | | | | | | | | | | | | | | | | 2 |
| Eosinophilic Focus | | X | X | | X | X | | | X | | | | | | | X | | | | | | | X | | 10 |
| Fatty Change | | | | | | | | | | | | | | | | 3 | 2 | 4 | | | | | | | 4 2.8 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | | | 3 | | | | 2 3.0 |
| Tension Lipidosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Mesentery | | | | | + | + | + | | | | + | | | | + | | | | + | + | + | + | + | + | 16 |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
312.5 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|----------------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
| | 04 | 07 | 07 | 03 | 07 | 06 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 05 | 07 | 07 | 07 | 06 | 07 | |
| ANIMAL ID | 09 | 03 | 03 | 08 | 03 | 02 | 07 | 02 | 03 | 03 | 01 | 02 | 03 | 03 | 03 | 00 | 01 | 03 | 03 | 02 | 03 | 03 | 02 | 06 | 03 | |
| | 04 | 00 | 01 | 02 | 00 | 08 | 02 | 00 | 00 | 00 | 01 | 09 | 00 | 00 | 00 | 04 | 08 | 01 | 03 | 04 | 00 | 00 | 09 | 02 | 01 | |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | |
| | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 02 | 03 | | |
| | 07 | 07 | 07 | 07 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 08 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 09 | 00 | | |
| | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | | |
| Fat, Hemorrhage | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fat, Necrosis | | | | | 2 | | 2 | 2 | | | 2 | | | | 2 | | | | 2 | 2 | 2 | 2 | 2 | 2 | | |
| Pancreas | A | + | + | A | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | A | + | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duct, Cyst | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | | |
| Stomach, Forestomach | + | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | | |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ulcer | | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| Stomach, Glandular | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |
| Thrombosis | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

| B6C3F1 MICE FEMALE | 312.5 mg/l | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--------------------|------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | | 4 | 7 | 7 | 3 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | | 7 |
| | | | 9 | 3 | 3 | 8 | 3 | 2 | 7 | 2 | 3 | 3 | 1 | 2 | 3 | 3 | 0 | 1 | 3 | 3 | 3 | 2 | 3 | 1 |
| | | | 4 | 0 | 1 | 2 | 0 | 8 | 2 | 9 | 0 | 0 | 1 | 9 | 0 | 0 | 4 | 8 | 1 | 3 | 4 | 0 | 0 | 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 |
| | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 |
| | | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 0 |

Capillary, Hyperplasia

1 2.0

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|--------------|--------------|
| Adrenal Cortex Hypertrophy | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | A | + | 45 | 1 3.0 | | |
| Adrenal Medulla Hyperplasia | + | + | + | A | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | A | + | 45 | 1 1.0 | |
| Islets, Pancreatic | A | + | + | A | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | 41 | | |
| Parathyroid Gland | M | + | M | M | + | + | + | + | + | M | + | + | + | M | M | M | + | M | M | + | + | + | + | M | + | 34 | |
| Pituitary Gland Pars Distalis, Angiectasis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 46 | 1 2.0 |
| Pituitary Gland Pars Distalis, Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 14 | 2.1 | |
| Thyroid Gland | + | + | + | M | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 45 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Ovary Cyst | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | 5 3.8 |
| Uterus | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

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

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|--|---|--|---|---|--|---|---|--|--|--|---|--|---|--|--|---|--|---|--|---|--|---------------|
| Angiectasis | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Endometrium, Hyperplasia, Cystic | 4 | 3 | | 4 | | 4 | 3 | | 4 | 4 | | | | 1 | | 4 | | | 3 | | 4 | | 3 | | 29 3.1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Bone Marrow | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 46 |
| Lymph Node | | | | | | | + | | | | | | | | | | | + | + | | + | | | | 8 |
| Mediastinal, Hyperplasia, Lymphoid | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Renal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Lymph Node, Mandibular | A | + | M | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 42 |
| Lymph Node, Mesenteric | A | + | + | A | + | + | A | + | + | + | A | + | + | + | A | + | + | + | + | + | + | + | + | + | 38 |
| Spleen | A | + | + | A | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | 42 |
| Hematopoietic Cell Proliferation | | | | | | | | | | | | | 2 | | | | | | | | | | | | 3 3.3 |
| Thrombosis | | | | | | | | | | | | 3 | | | | | | | | | | | | | 1 3.0 |
| Thymus | + | + | + | + | + | + | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | A | + | 44 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Hyperplasia, Squamous | | | | | | | | | | | | | | | | | | | | | | | | | 1 4.0 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 2 4.0 |

MUSCULOSKELETAL SYSTEM

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 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 | 0 | |
|-----------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| B6C3F1 MICE FEMALE | DAY ON TEST | 4 | 7 | 7 | 3 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
| | ANIMAL ID | 9 | 3 | 3 | 8 | 3 | 2 | 7 | 2 | 3 | 3 | 1 | 2 | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 6 | 3 | |
| | 312.5 mg/l | 4 | 0 | 1 | 2 | 0 | 8 | 2 | 9 | 0 | 0 | 1 | 9 | 0 | 0 | 4 | 8 | 1 | 3 | 4 | 0 | 0 | 9 | 2 | 1 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Bone | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 47 |
| Hemorrhage | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1 2.0 |
| Necrosis | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 1.0 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 50 |
| Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | 4 | | | | | | | | 3 3.0 |
| Alveolar Epithelium, Hyperplasia | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | 4 2.5 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | 1 3.0 |
| Nose | | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | M | + | 44 |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 1.0 |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | | | 1 | | | | | | | | | | | 1 | | | | | | | | 2 1.0 |
| Respiratory Epithelium, Hyperplasia | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | 2 1.0 |
| Trachea | | A | + | + | A | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | M | + | 41 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | A | + | + | A | + | A | A | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | M | + | 35 |
| Cornea, Inflammation, Acute | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | 1 2.0 |
| Harderian Gland | | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | M | + | 41 |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | 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 | ANIMAL ID | females
(cont...) | |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|--|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | | | |
| | 2 | 3 | 0 | 0 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 2 | 2 | 3 | 1 | 4 | 4 | 3 | 3 | 0 | |
| | 9 | 1 | 4 | 4 | 1 | 9 | 0 | 9 | 9 | 0 | 1 | 9 | 1 | 9 | 0 | 9 | 1 | 9 | 9 | 0 | 2 | 3 | 7 | 1 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 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 | 0 | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Gallbladder
Degeneration, Hyaline | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | A | + | + |
| Intestine Large, Cecum | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + |
| Intestine Large, Colon | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + |
| Intestine Large, Rectum | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + |
| Intestine Small, Duodenum
Lymphangiectasis | + | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + |
| Intestine Small, Ileum
Inflammation, Acute | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + |
| Intestine Small, Jejunum
Inflammation, Acute | + | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | + |
| Liver
Angiectasis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus | | | 2 | | | | | | | | 2 | | | | | | | | | | | | | | |
| Clear Cell Focus | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eosinophilic Focus | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatty Change | | | | | | | | | | | | | | | | | | | | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | ANIMAL ID | females
(cont...) | |
|-----------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|------------------|
| | 0
7
2
9 | 0
7
3
1 | 0
7
0
4 | 0
7
0
4 | 0
7
3
1 | 0
7
2
9 | 0
7
3
0 | 0
7
2
9 | 0
7
3
2 | 0
7
2
9 | 0
7
3
3 | 0
7
2
3 | 0
7
3
1 | 0
7
3
9 | 0
7
3
1 | 0
7
3
9 | 0
7
2
9 | 0
7
2
9 | 0
7
3
0 | 0
7
3
1 | 0
7
4
3 | 0
7
4
7 | 0
7
3
1 | 0
7
3
0 | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
3
0 | 0
0
3
1 | |
| Islets, Pancreatic
Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 0
0
3
0 | 0
0
3
1 |
| Parathyroid Gland
Hyperplasia | + | + | + | + | + | M | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 0
0
3
0 | 0
0
3
1 | |
| Pituitary Gland
Pars Distalis, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 2
2
3
2 | 0
0
3
1 |
| Thyroid Gland
Follicular Cell, Hypertrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 0
0
3
0 | 0
0
3
1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|------------------|------------------|------------------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 0
0
3
0 | 0
0
3
1 |
| Ovary
Cyst
Thrombosis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 0
0
3
0 | 0
0
3
1 | |
| Uterus
Thrombosis
Endometrium, Hyperplasia, Cystic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2
4
2 | 3
4
4 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | 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 | ANIMAL ID | females
(cont...) | |
|--------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | | | |
| | 2 | 3 | 0 | 0 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 0 | 3 | 2 | 3 | 2 | 2 | 3 | 1 | 4 | 4 | 3 | 3 | 0 | 0 |
| | 9 | 1 | 4 | 4 | 1 | 9 | 0 | 9 | 0 | 1 | 9 | 1 | 9 | 0 | 9 | 9 | 1 | 9 | 9 | 0 | 2 | 3 | 7 | 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 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 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 | 0 | 0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node
Lumbar, Hemorrhage | | | | + | | | | | | + | + | | | | | | | | | | | + | | |
| Renal, Ectasia | | | | | | | | | | | | 4 | | | | | | | | | | | | |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric
Hemorrhage | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen
Hematopoietic Cell Proliferation | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus
Amyloid Deposition | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Lymphoid | | | | | | | | | | | | | | 2 | | | | | | | | | | |
| | | | | | | | | | | | | | | | 2 | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin
Inflammation, Acute | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | 3 | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

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

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|--------------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------------|----------------------|----------------------|
| | 0729 | 0648 | 0660 | 0549 | 0771 | 0773 | 0777 | 0779 | 0777 | 0777 | 0577 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0676 | 0777 | 0777 | | 0666 | 0667 | 0773 | | |
| ANIMAL ID | 00326 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | | | |
| Fat, Necrosis | 2 | | | | | | | | | | | | | | | | | | | | | | | 13 2.0 | | |
| Pancreas Atrophy | + | A | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | 46
2 1.0 | | |
| Salivary Glands | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | 47 | | |
| Stomach, Forestomach Hyperplasia, Squamous Ulcer | + | + | + | A | + | + | + | + | + | + | 2 | + | + | + | + | + | A | + | 2 | + | + | + | A | + | 45
3 2.0
1 3.0 | |
| Stomach, Glandular Dysplasia Mineralization | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 2 | + | + | + | A | A | + | 41
1 2.0
1 2.0 |
| Tooth Dysplasia | | | | M | | | | | | | | | | | | | + | | | | | | | | 2
2 | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------------------|-------|
| Blood Vessel Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | 1
3 | 1 3.0 |
| Heart Cardiomyopathy Mineralization | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49
7 1.1
1 2.0 | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|-------|
| Adrenal Cortex Vacuolization Cytoplasmic | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | 46
3 | 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | |
|----------------------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|----|-----|-----|-----|-----|
| | 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 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | | | | | | |
| ANIMAL ID | 2 | 4 | 2 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 1 | 3 | 1 | 3 | 1 | 8 | 6 | 3 | | | | | | |
| | 9 | 8 | 0 | 9 | 1 | 1 | 0 | 9 | 0 | 1 | 2 | 1 | 9 | 9 | 0 | 1 | 0 | 7 | 0 | 1 | 0 | 7 | 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 | | | | | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | | | | | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | | |
| Adrenal Medulla | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | 46 | | | | | |
| Islets, Pancreatic
Hyperplasia | + | A | + | A | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | 45 | | | | | |
| Parathyroid Gland
Hyperplasia | + | + | + | M | + | M | + | + | + | + | + | + | + | M | M | + | + | M | M | M | + | + | + | M | + | 40 | | | | |
| Pituitary Gland
Pars Distalis, Hyperplasia | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 47 | | | | |
| | | | | | | | | | 2 | 3 | | | | | | 2 | 3 | | | | | | | | | 13 | 2.3 | | | |
| Thyroid Gland
Follicular Cell, Hypertrophy | + | A | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | M | + | + | + | + | + | 45 | | | | |
| | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | 1 | 2.0 | | |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | |
| Ovary
Cyst
Thrombosis | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | 48 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 3.0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 4.0 | |
| Uterus
Thrombosis
Endometrium, Hyperplasia, Cystic | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| | | | | | 4 | | 1 | 3 | 4 | | 4 | 4 | | 3 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 3 | 2 | | 3 | 4 | 33 | 3.4 | |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE

625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | * TOTALS | | |
|------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| | 7 | 6 | 6 | 5 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | | 6 | 7 |
| | 2 | 4 | 2 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 1 | 3 | 1 | 3 | 1 | 8 | 6 | 3 |
| | 9 | 8 | 0 | 9 | 1 | 1 | 0 | 9 | 0 | 1 | 2 | 1 | 9 | 0 | 1 | 0 | 7 | 0 | 1 | 0 | 7 | 6 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|---|-----|
| Bone Marrow | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | | | |
| Lymph Node | | | | | | | | | + | | | | | | | | | | | | + | | | | 6 | | |
| Lumbar, Hemorrhage | | | | | | | | 3 | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Renal, Ectasia | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 |
| Lymph Node, Mandibular
Hyperplasia, Lymphoid | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | A | + | M | + | + | + | + | + | 47 | 1 | 3.0 |
| Lymph Node, Mesenteric
Hemorrhage | + | A | + | A | + | + | + | + | + | A | + | + | + | + | + | + | A | + | A | + | + | + | + | + | 45 | 1 | 3.0 |
| Spleen
Hematopoietic Cell Proliferation | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | A | + | 45 | 5 | 2.2 |
| Thymus
Amyloid Deposition
Hyperplasia, Lymphoid | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | 48 | 1 | 2.0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|
| Mammary Gland | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Skin
Inflammation, Acute | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 | 3.0 |

MUSCULOSKELETAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue

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

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
625 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | * TOTALS |
|-----------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| | 0729 | 0648 | 0624 | 0544 | 0733 | 0733 | 0772 | 0772 | 0772 | 0772 | 0577 | 0772 | 0772 | 0772 | 0772 | 0772 | 0676 | 0777 | 0777 | 0666 | 0667 | |
| ANIMAL ID | 00326 | 00332 | 00332 | 00332 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | 00333 | |
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| NERVOUS SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Brain | + | A | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 47 |
| RESPIRATORY SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | 3 | | 1 3.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | 2 | | 2 2.0 |
| Alveolar Epithelium, Hyperplasia | 1 | | | | | | | | | | | | | | | | | | | | | 3 1.3 |
| Alveolus, Infiltration Cellular, Histiocyte | | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Bronchiole, Hyperplasia | | | | | | | | | | | | | | | | | | | | | 1 | 3 2.0 |
| Nose | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Olfactory Epithelium, Atrophy | | | | | | | | | | | | | | 1 | | | | | | | 1 | 2 1.0 |
| Olfactory Epithelium, Metaplasia, Respiratory | | | | | | | | 1 | 1 | | 1 | | | | | | | 1 | 1 | | | 7 1.0 |
| Respiratory Epithelium, Hyperplasia | | | | | 1 | | | 1 | | | | | | | | | | | | 1 | | 6 1.0 |
| Trachea | + | A | + | M | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | 45 |
| SPECIAL SENSES SYSTEM | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | A | A | M | + | + | + | + | + | + | A | + | + | + | + | + | A | + | M | + | M | 36 |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | 1 3.0 |
| Harderian Gland | + | + | + | M | + | + | + | + | + | + | A | + | + | + | + | + | A | + | M | + | + | 43 |
| Hyperplasia | 2 | | | | | | | | | | | | | | | | | | | | | 1 2.0 |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | 1 1.0 |

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| B6C3F1 MICE FEMALE | DAY ON TEST | 07 | 06 | 06 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 05 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 06 | 07 | * TOTALS |
| | | 29 | 48 | 20 | 49 | 31 | 31 | 30 | 29 | 30 | 31 | 22 | 33 | 22 | 29 | 30 | 31 | 30 | 17 | 30 | 11 | 33 | 11 | 86 | 69 | 30 | |
| | ANIMAL ID | 00326 | 00327 | 00328 | 00329 | 00330 | 00331 | 00332 | 00333 | 00334 | 00335 | 00336 | 00337 | 00338 | 00339 | 00340 | 00341 | 00342 | 00343 | 00344 | 00345 | 00346 | 00347 | 00348 | 00349 | 00350 | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|--|---|---|---|--|--|--|---|---|--|--|---|---|--|--|--|---|---|--|---|--|---|----|-----|-----|
| Kidney | + | | | | | | | | | | | | | | | | | | | | | | | | 48 | | |
| Amyloid Deposition | A | A | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |
| Metaplasia, Osseous | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | 3 | | | | 1 | 3.0 |
| Nephropathy | | | | 1 | 1 | 2 | | | | 1 | 1 | | | 1 | 2 | | | | 1 | 3 | | | | 1 | 25 | 1.5 | |
| Renal Tubule, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 | 2.0 |
| Urinary Bladder | + | | | | | | | | | | | | | | | | | | | | | | | | 39 | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
1250 mg/l | 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 | ANIMAL ID | females
(cont...) | |
|--------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 2 | 2 | 4 | | | 8 |
| | | 2 | 2 | 2 | 2 | 1 | 3 | 6 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 7 | 3 | 8 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 4 | 8 | | |
| | | 9 | 9 | 9 | 9 | 6 | 1 | 9 | 9 | 2 | 2 | 0 | 9 | 9 | 0 | 7 | 3 | 2 | 2 | 7 | 0 | 0 | 1 | 1 | 2 | 9 | 8 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | | 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 | | | |
| Fat, Necrosis | | | | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas Atrophy | | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | | | |
| Salivary Glands Inflammation, Chronic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Stomach, Forestomach Hyperplasia, Squamous | | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | + | | | |
| Stomach, Glandular | | + | + | + | + | A | + | + | + | A | A | + | + | + | + | + | + | A | + | A | + | + | + | A | + | + | | | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tooth Dysplasia | | | | + | | + | | + | | | | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Heart | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. 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. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
1250 mg/l | 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 | ANIMAL ID | females
(cont...) | | | | | | | | | |
|-----------------------------------------------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|---|---|---|---|---|---|---|--|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | | | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 6 | |
| | | 2 | 2 | 2 | 2 | 1 | 3 | 6 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 7 | 3 | 8 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 8 | | | |
| | | 9 | 9 | 9 | 9 | 6 | 1 | 9 | 9 | 2 | 2 | 0 | 9 | 0 | 0 | 7 | 3 | 2 | 2 | 7 | 0 | 0 | 1 | 1 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | |
| Islets, Pancreatic
Hyperplasia | | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | | 3 | | |
| Parathyroid Gland | | + | M | + | + | + | + | + | M | + | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | | |
| Pituitary Gland
Pars Distalis, Angiectasis
Pars Distalis, Hyperplasia | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | | 3 | | |
| Thyroid Gland
Cyst
Follicular Cell, Hyperplasia | | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 2 | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Ovary
Cyst
Thrombosis | | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | 2 |
| Uterus
Inflammation, Acute
Necrosis | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
1250 mg/l | 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 | females
(cont...) | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------------------|---|
| | | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 5 | 5 | 6 | 6 | 7 | 7 | 3 | 7 | 3 | 2 | | | 7 |
| | | 2 | 2 | 2 | 2 | 1 | 3 | 6 | 2 | 1 | 2 | 3 | 2 | 2 | 3 | 7 | 3 | 8 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 4 | | |
| | | 9 | 9 | 9 | 9 | 6 | 1 | 9 | 9 | 2 | 2 | 0 | 9 | 0 | 7 | 3 | 2 | 2 | 7 | 0 | 0 | 0 | 1 | 1 | 9 | 8 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 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 | | | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | M | + | + | + | A | A | + | + | + | + | A | + | A | + | A | + | + | + | A | + | + |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cornea, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | + | + | + | + | + | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | |
| Mineralization | | | | | 2 | | | | | | | | | | | | | | | | | | 3 | |
| Nephropathy | 1 | | | 1 | 2 | 1 | | 2 | | | | | 1 | | 1 | 2 | 1 | 3 | | 1 | 1 | 1 | 3 | 1 |
| Renal Tubule, Necrosis | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | + | + | + | + | A | + | + | + | A | A | + | M | + | + | + | + | A | + | + | + | + | + | + | + |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | 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:
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 2) Mild 4) Marked

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
1250 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|--------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|--------------|
| | 0729 | 0731 | 0731 | 0732 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | | |
| ANIMAL ID | 00376 | 00377 | 00378 | 00379 | 00380 | 00381 | 00382 | 00383 | 00384 | 00385 | 00386 | 00387 | 00388 | 00389 | 00390 | 00391 | 00392 | 00393 | 00394 | 00395 | 00396 | 00397 | 00398 | 00399 | | |
| Fat, Necrosis | 2 | 2 | | | | 2 | | | 2 | | | | | | | | | | | | | | | 2 | 8 2.0 | |
| Pancreas Atrophy | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | 45 | 1 1.0 |
| Salivary Glands Inflammation, Chronic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1 2.0 |
| Stomach, Forestomach Hyperplasia, Squamous | + | + | + | + | + | + | + | + | 3 | + | + | + | + | + | + | + | + | + | + | + | + | 1 | + | + | 47 | 3 2.7 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | A | 41 | |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Tooth Dysplasia | | | | | | | | | | | | | | | | | | | | | | | | | 9 | 9 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Cardiomyopathy | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3 1.0 |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 | 3.0 |
| Artery, Inflammation, Chronic Active | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Hyperplasia | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Hypertrophy | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 1 2.0 |

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
 M .. Missing tissue
 A .. Autolysis precludes evaluation
 BLANK .. Not examined microscopically

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | | | |
|--------------------------------|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|------|------|---|---|--------------|-----------|
| | | 0729 | 0731 | 0731 | 0732 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | | 0733 | 0733 | | | | |
| 1250 mg/l | | 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 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 4 | 6 | 5 | 7 | 5 | |
| | | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 6 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 9 | 4 | 0 | 3 | 8 | |
| | | 9 | 1 | 1 | 1 | 9 | 1 | 1 | 0 | 4 | 9 | 9 | 9 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 1 | 9 | 0 | 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 | 0 | |
| | | 0 | 0 | 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 | 4 | |
| | | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Islets, Pancreatic Hyperplasia | | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | A | + | + | 45 |
| | | | | | | | | | | | | | | | | | | | | | | 1 3.0 | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | M | + | + | + | M | + | M | + | + | + | + | M | M | + | + | + | + | + | + | 41 |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | M | + | + | + | I | + | + | + | + | + | A | + | + | + | + | + | 46 |
| Pars Distalis, Angiectasis | | | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | | | | |
| Pars Distalis, Hyperplasia | | 3 | | | | | 2 | | | | | 2 | | | | | 3 | | | | | 2 | | | | | 7 2.4 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Cyst | | | | | | | | | | | | | | | | | | | | | | 2 2.5 | | | | | | |
| Follicular Cell, Hyperplasia | | 2 | | | | | | | | | | | | | | | | | | | | 1 2.0 | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|---|--------------|---|---|---|-----------|
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 47 |
| Cyst | | 3 | | | | | 4 | | | | | 3 | | | | | | | | | | 4 3.0 | | | | | | |
| Thrombosis | | 4 4 | | | | | | | | | | | | | | | | | | | | | | 4 4.0 | | | | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 49 |
| Inflammation, Acute | | | | | | | | | | | | | | | | | | | | | | 2 3.5 | | | | | | |
| Necrosis | | | | | | | | | | | | | | | | | | | | | | 1 4.0 | | | | | | |

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

TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
|----------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|---------------|
| | 0729 | 0731 | 0731 | 0733 | 0732 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | 0733 | | |
| 1250 mg/l | 00376 | 00377 | 00378 | 00379 | 00380 | 00381 | 00382 | 00383 | 00384 | 00385 | 00386 | 00387 | 00388 | 00389 | 00390 | 00391 | 00392 | 00393 | 00394 | 00395 | 00396 | 00397 | 00398 | 00399 | 00400 | |
| Endometrium, Hyperplasia, Cystic | 4 | 1 | 2 | 3 | 1 | 1 | 4 | | 4 | 3 | 2 | 4 | 3 | 3 | 4 | 2 | | | | | | | | | | 37 3.0 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|--------------|------------------------------|
| Bone Marrow
Angiectasis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | 49 | 1 2.0 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 8 | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | 47 | | |
| Lymph Node, Mesenteric
Angiectasis
Hemorrhage | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | A | 46 | 1 3.0
1 3.0 |
| Spleen
Hematopoietic Cell Proliferation
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | A | + | + | A | 46 | 1 3.0
1 2.0 |
| Thymus
Hyperplasia, Lymphoid | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | 47 | 1 3.0 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
 + .. Tissue examined microscopically
 X .. Lesion present
 I .. Insufficient tissue
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1-4 .. Lesion qualified as:
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TDMS No. 20009 - 04
 Test Type: CHRONIC
 Route: DOSED WATER
 Species/Strain: MICE/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
 beta-Picoline
 CAS Number: 108-99-6

Date Report Requested: 05/27/2011
 Time Report Requested: 09:52:36
 First Dose M/F: 11/09/04 / 11/08/04
 Lab: BAT

| B6C3F1 MICE FEMALE
1250 mg/l | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | | | | |
|--------------------------------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----|-----|
| | 079 | 073 | 073 | 073 | 072 | 073 | 073 | 073 | 073 | 066 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 077 | 075 | 077 | 074 | 076 | 075 | 077 | | 075 | | | |
| ANIMAL ID | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | A | A | + | A | 39 | | | |
| Degeneration | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 4.0 | | |
| Cornea, Inflammation, Chronic Active | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 47 | | |
| Hyperplasia | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | 1 | 3.0 | |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| URINARY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | | |
| Inflammation, Suppurative | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |
| Mineralization | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2.5 |
| Nephropathy | | | | 2 | 1 | 1 | 2 | 1 | 3 | | 1 | 1 | | | | | 1 | | | | | 2 | | | | | 30 | 1.6 | |
| Renal Tubule, Necrosis | | | | | | | | | | | | | | | | | | | | | | | 4 | | 3 | | | 2 | 3.5 |
| Urinary Bladder | + | + | + | + | + | + | + | + | A | + | + | + | M | + | + | + | + | + | + | + | + | + | A | + | + | A | 41 | | |
| Inflammation, Chronic | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2.0 |

*** END OF REPORT ***

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