

**Experiment Number:** 10188 - 02  
**Test Type:** CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Di(2-ethylhexyl) Phthalate  
**CAS Number:** 117-81-7

**Date Report Requested:** 06/02/2020  
**Time Report Requested:** 13:48:37  
**First Dose M/F:** 06/27/11 / 06/28/11  
**Lab:** BAT

Final 4

**NTP Study Number:** C10188  
**Lock Date:** 07/15/2015  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** NONE



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HARLAN SPRAGUE DAWLEY RATS MALE 0 ppm Male	DAY ON TEST																								ANIMAL ID	males (cont...)
	0696	0731	0779	0779	0540	0557	0772	0772	0667	0772	0753	0333	0333	0772	0772	0772	0772	0666	0772	0662	0422	0477	0577	0772		
Bile Duct, Dilation																										
Bile Duct, Hyperplasia				2				1	2							1		1			1	1				
Mesentery																										
Polyarteritis Nodosa																										
Artery, Mineral																										2
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Basophilic Focus																										
Polyarteritis Nodosa				2			1														2		1	1	1	
Acinus, Atrophy																										1
Acinus, Hyperplasia	4	4								3					4											1
Artery, Mineral																										1
Artery, Necrosis																										2
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Polyarteritis Nodosa																										
Artery, Mineral																										
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic																										
Inflammation, Chronic Active	2						1							1												
Mineral																										1 2
Polyarteritis Nodosa																										
Ulcer																										1
Artery, Mineral																										
Epithelium, Hyperplasia	2																									2
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Inflammation, Chronic Active																										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

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HARLAN SPRAGUE DAWLEY RATS MALE 0 ppm Male	DAY ON TEST	0696	0731	0729	0729	0540	0557	0772	0776	0667	0775	0535	0733	0733	0733	0720	0678	0729	0622	0442	0577	0729	0577	ANIMAL ID	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	males (cont...)
	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																						

Mineral 1 2 4  
 Artery, Mineral

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mineral																					1	3		
Heart	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardiomyopathy	1	1							1	2				1	1	1	2	1	1			2	3	2
Mineral																						2	4	
Polyarteritis Nodosa											1													
Artery, Mineral																						2		
Atrium, Thrombus																								
Schwann Cell, Hyperplasia																								
Valve, Degeneration		1																						
Valve, Inflammation, Chronic																								

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Degeneration, Cystic																								
Hyperplasia, Focal					1																			
Hypertrophy, Focal			1						1											2				1
Necrosis	2																							
Bilateral, Hyperplasia, Focal																								
Bilateral, Hypertrophy, Focal																								1
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hyperplasia, Focal						1		2											1			1	1	2

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HARLAN SPRAGUE DAWLEY RATS MALE 0 ppm Male	DAY ON TEST																								ANIMAL ID	males (cont...)
	0696	0731	0779	0779	0540	0557	0772	0772	0667	0772	0753	0333	0333	0772	0772	0772	0772	0667	0772	0667	0227	0447	0557	0772		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	

Bilateral, Hyperplasia, Focal

1

Islets, Pancreatic  
Hyperplasia

+ +

2

2

Parathyroid Gland  
Hyperplasia, Diffuse  
Hypertrophy, Focal

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

1

Pituitary Gland  
Pars Distalis, Hyperplasia  
Pars Distalis, Hypertrophy

+ +

1

1

1

1

2

3

1

Thyroid Gland  
C-cell, Hyperplasia

+ +

2

2

3

4

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis  
Inflammation, Chronic Active  
Bilateral, Hypospermia  
Bilateral, Polyarteritis Nodosa  
Bilateral, Duct, Exfoliated Germ Cell

+ +

2

1

3

Preputial Gland  
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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| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0 ppm Male | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|
|  | 0696        | 0731 | 0779 | 0779 | 0540 | 0557 | 0772 | 0772 | 0667 | 0772 | 0775 | 0333 | 0333 | 0333 | 0333 | 0333 | 0220 | 0678 | 0672 | 0227 |           |                    | 0446 | 0579 |
|  | 0000        | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000      | 0000               | 0000 | 0000 |
|  | 1234        | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234 | 5678 | 9012 | 3456 | 7890 | 1234      | 5678               | 9012 | 3456 |

|                  |   |  |   |   |   |  |  |  |  |  |  |   |   |   |  |  |  |   |   |  |  |   |   |   |
|------------------|---|--|---|---|---|--|--|--|--|--|--|---|---|---|--|--|--|---|---|--|--|---|---|---|
| Hypercellularity | 2 |  | 1 | 3 | 3 |  |  |  |  |  |  | 4 | 2 | 1 |  |  |  | 1 | 2 |  |  | 1 | 1 | 3 |
|------------------|---|--|---|---|---|--|--|--|--|--|--|---|---|---|--|--|--|---|---|--|--|---|---|---|

Lymph Node  
Lumbar, Infiltration Cellular, Plasma Cell  
Mediastinal, Hemorrhage  
Pancreatic, Hyperplasia, Lymphocyte

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mandibular Atrophy<br>Infiltration Cellular, Plasma Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mesenteric Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen Extramedullary Hematopoiesis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Hyperplasia, Histiocytic Pigment    |   | 2 | 1 | 2 |   | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 1 |   | 2 | 1 | 1 | 2 |   | 2 | 1 |
| White Pulp, Atrophy                 | 2 |   | 2 | 2 | 1 | 2 |   | 2 | 2 | 2 | 2 |   | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 |   |
| White Pulp, Hyperplasia             |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   | 2 |   | 3 |   |

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus Atrophy       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Polyarteritis Nodosa | 4 | 2 | 2 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 1 | 3 | 4 |   | 2 | 2 | 1 | 4 | 2 | 2 | 1 | 4 | 4 | 2 | 3 |

INTEGUMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland Hyperplasia<br>Artery, Mineral | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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|-------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|             | 0696                            | 0731 | 0779 | 0779 | 0540 | 0557 | 0772 | 0772 | 0667 | 0776 | 0775 | 0335 | 0333 | 0333 | 0333 | 0772 | 0773 | 0668 | 0772 | 0662 | 0664 | 0227 | 0476 | 0579 |           |                 |
| 0 ppm Male  | 0000                            | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000      | 0000            |
|             | 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         |                 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative    |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epidermis, Hyperplasia       |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

MUSCULOSKELETAL SYSTEM

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cartilage, Joint, Degeneration |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Skeletal Muscle                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Mineral                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

NERVOUS SYSTEM

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Necrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Peripheral Nerve                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Axon, Degeneration                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ganglion, Vacuolization Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Spinal Cord                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nerve, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

RESPIRATORY SYSTEM

|      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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|-------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|
|             | 0696                            | 0731 | 0729 | 0729 | 0540 | 0557 | 0772 | 0772 | 0667 | 0775 | 0733 | 0533 | 0333 | 0333 | 0771 | 0772 | 0773 | 0668 | 0772 | 0662 | 0442 | 0442 | 0577 | 0577 | 0777 |           |                 |
| 0 ppm Male  | 0000                            | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000      | 0000            |
|             | 01                              | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02   | 03   | 04   | 05   | 06   | 07   | 08   | 09   | 00   | 01   | 02   | 02   | 03   | 04   | 05        | 02              |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fibrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |
| Hemorrhage  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Infiltration Cellular, Histiocyte                     | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   | 3 | 3 |   | 1 |   | 1 | 2 | 1 | 2 |   | 2 |   | 2 | 3 |   | 1 |   |   |   |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Inflammation, Acute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |
| Metaplasia, Osseous                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Mineral   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Mineral                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Nose  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Foreign Body  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |
| Inflammation, Suppurative                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 3 |
| Inflammation, Acute                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Glands, Respiratory Epithelium, Dilation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 | 2 | 3 | 1 | 3 | 1 |   | 3 | 1 | 1 | 3 | 1 | 1 | 2 | 2 |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Respiratory Epithelium, Hyperplasia                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Trachea   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Eye                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |
| Bilateral, Cornea, Inflammation, Acute |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Choroid, Hyperplasia                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Cornea, Inflammation, Acute            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 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









Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0 ppm Male | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>5<br>4<br>7      | 0<br>7<br>2<br>9      | 0<br>3<br>2<br>8      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>6<br>1<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>5<br>9<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>6<br>8<br>5      | 0<br>5<br>9<br>8      | 0<br>6<br>7<br>3      | 0<br>4<br>3<br>6      | 0<br>5<br>7<br>7      | 0<br>7<br>0<br>7      | 0<br>5<br>9<br>7      |                       |          |
| ANIMAL ID  | 0<br>0<br>0<br>2<br>6 | 0<br>0<br>0<br>2<br>7 | 0<br>0<br>0<br>2<br>8 | 0<br>0<br>0<br>2<br>9 | 0<br>0<br>0<br>3<br>0 | 0<br>0<br>0<br>3<br>1 | 0<br>0<br>0<br>3<br>2 | 0<br>0<br>0<br>3<br>3 | 0<br>0<br>0<br>3<br>3 | 0<br>0<br>0<br>3<br>4 | 0<br>0<br>0<br>3<br>5 | 0<br>0<br>0<br>3<br>6 | 0<br>0<br>0<br>3<br>7 | 0<br>0<br>0<br>3<br>8 | 0<br>0<br>0<br>3<br>9 | 0<br>0<br>0<br>4<br>0 | 0<br>0<br>0<br>4<br>1 | 0<br>0<br>0<br>4<br>2 | 0<br>0<br>0<br>4<br>3 | 0<br>0<br>0<br>4<br>4 | 0<br>0<br>0<br>4<br>5 | 0<br>0<br>0<br>4<br>6 | 0<br>0<br>0<br>4<br>7 | 0<br>0<br>0<br>4<br>8 | 0<br>0<br>0<br>4<br>9 |          |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                 |       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----------------|-------|
| Bilateral, Hyperplasia, Focal   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2 1.5           |       |
| Islets, Pancreatic<br>Hyperplasia   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50              | 4 2.0 |
| Parathyroid Gland<br>Hyperplasia, Diffuse<br>Hypertrophy, Focal             | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | M | + | + | 42 | 2 2.5<br>1 1.0  |       |
| Pituitary Gland<br>Pars Distalis, Hyperplasia<br>Pars Distalis, Hypertrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 19 1.8<br>3 1.0 |       |
| Thyroid Gland<br>C-cell, Hyperplasia  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 5 2.4           |       |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |                                  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------------------------------|
| Epididymis<br>Inflammation, Chronic Active<br>Bilateral, Hypospermia<br>Bilateral, Polyarteritis Nodosa<br>Bilateral, Duct, Exfoliated Germ Cell | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 49 | 1 1.0<br>4 2.3<br>2 1.5<br>6 2.5 |
| Preputial Gland<br>Inflammation, Suppurative   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS MALE |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | * TOTALS |
|-------------|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|----------|
|             | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |           |          |
| 5           | 7                               | 3 | 7 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7         |          |
| 4           | 2                               | 2 | 3 | 3 | 1 | 3 | 3 | 9 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 8 | 9 | 7 | 3 | 7 | 0 | 9         |          |
| 7           | 9                               | 8 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 1 | 1 | 8 | 2 | 1 | 1 | 0 | 0 | 5 | 8 | 8 | 3 | 6 | 4 | 7 | 7         |          |
| 0           | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |          |
| 0           | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |          |
| 0           | 0                               | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0         |          |
| 2           | 2                               | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 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         |          |

Inflammation, Chronic Active 4 1 4.0

Prostate 50

Artery, Mineral 2 1 2.0

Dorsal, Lateral, Inflammation, Acute 1 1.0

Dorsal, Lateral, Inflammation, Chronic Active 4 1 4.0

Epithelium, Ventral, Hyperplasia 2 3 1 4 2.3

Ventral, Hemorrhage 1 4.0

Ventral, Inflammation, Acute 1 3 2.3

Ventral, Inflammation, Chronic 1 1.0

Ventral, Inflammation, Chronic Active 4 1 3 2.0

Seminal Vesicle 50

Bilateral, Inflammation, Acute 2 2 2.0

Bilateral, Inflammation, Chronic Active 2 1 2.0

Testis 49

Degeneration 3 1 3.0

Edema 1 3 3 2 8 1.6

Polyarteritis Nodosa 1 1.0

Bilateral, Edema 1 1 1 1 12 1.0

Bilateral, Polyarteritis Nodosa 2 1 1 1 1 2 2 18 1.9

Bilateral, Germinal Epithelium, Degeneration 2 3 10 1.6

Germinal Epithelium, Degeneration 3 1 1 3 6 1.7

Interstitial Cell, Hyperplasia, Focal 2 3 4 2.0

Tunic, Hyperplasia, Mesothelium 1 1 1.0

HEMATOPOIETIC SYSTEM

Bone Marrow + 50

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



Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>0 ppm Male | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|  | 0<br>5<br>4<br>7      | 0<br>7<br>2<br>9      | 0<br>3<br>2<br>8      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>6<br>1<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>5<br>9<br>3      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>8      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>6<br>8<br>5      | 0<br>5<br>9<br>8      | 0<br>6<br>7<br>3      | 0<br>4<br>3<br>6      | 0<br>5<br>7<br>7      | 0<br>7<br>0<br>7      | 0<br>5<br>9<br>7      |                       |          |
| ANIMAL ID  | 0<br>0<br>0<br>2<br>6 | 0<br>0<br>0<br>2<br>7 | 0<br>0<br>0<br>2<br>8 | 0<br>0<br>0<br>3<br>9 | 0<br>0<br>0<br>3<br>0 | 0<br>0<br>0<br>3<br>1 | 0<br>0<br>0<br>3<br>2 | 0<br>0<br>0<br>3<br>3 | 0<br>0<br>0<br>3<br>4 | 0<br>0<br>0<br>3<br>5 | 0<br>0<br>0<br>3<br>6 | 0<br>0<br>0<br>3<br>7 | 0<br>0<br>0<br>3<br>8 | 0<br>0<br>0<br>3<br>9 | 0<br>0<br>0<br>4<br>0 | 0<br>0<br>0<br>4<br>1 | 0<br>0<br>0<br>4<br>2 | 0<br>0<br>0<br>4<br>3 | 0<br>0<br>0<br>4<br>4 | 0<br>0<br>0<br>4<br>5 | 0<br>0<br>0<br>4<br>6 | 0<br>0<br>0<br>4<br>7 | 0<br>0<br>0<br>4<br>8 | 0<br>0<br>0<br>4<br>9 | 0<br>0<br>0<br>5<br>0 |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Cyst Epithelial Inclusion    |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3     |
| Inflammation, Suppurative    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   | 3 3.3 |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Epidermis, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |

**MUSCULOSKELETAL SYSTEM**

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |       |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-------|
| Bone                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |       |
| Cartilage, Joint, Degeneration |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       | 1 1.0 |
| Skeletal Muscle                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + | 2     |       |
| Artery, Mineral                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   | 1 2.0 |       |

**NERVOUS SYSTEM**

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |       |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-------|
| Brain                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50    |
| Necrosis                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |     | 1 2.0 |
| Peripheral Nerve                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 3     |
| Axon, Degeneration                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1 2.0 |
| Ganglion, Vacuolization Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1 | 2 1.0 |
| Spinal Cord                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1     |
| Nerve, Degeneration                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     | 1 1.0 |

**RESPIRATORY SYSTEM**

|      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

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

+ .. Tissue examined microscopically

X .. Lesion present

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>300 ppm Male | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                       | ANIMAL ID | males<br>(cont...) |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|-----------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|  | 0<br>3<br>1<br>4 | 0<br>7<br>3<br>2 | 0<br>4<br>8<br>6 | 0<br>7<br>3<br>2 | 0<br>5<br>4<br>5 | 0<br>5<br>4<br>6 | 0<br>6<br>6<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>6<br>3<br>8 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>6<br>3<br>0 | 0<br>7<br>3<br>3 | 0<br>7<br>3<br>3 | 0<br>6<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>6<br>8<br>8 | 0<br>6<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>7<br>2<br>9 | 0<br>6<br>3<br>1 | 0<br>0<br>0<br>5<br>1 |           |                    | 0<br>0<br>0<br>5<br>1 | 0<br>0<br>0<br>5<br>3 | 0<br>0<br>0<br>5<br>4 | 0<br>0<br>0<br>5<br>5 | 0<br>0<br>0<br>5<br>6 | 0<br>0<br>0<br>5<br>7 | 0<br>0<br>0<br>5<br>8 | 0<br>0<br>0<br>5<br>9 | 0<br>0<br>0<br>6<br>6 | 0<br>0<br>0<br>6<br>6 | 0<br>0<br>0<br>6<br>1 | 0<br>0<br>0<br>6<br>2 | 0<br>0<br>0<br>6<br>3 | 0<br>0<br>0<br>6<br>4 | 0<br>0<br>0<br>6<br>5 | 0<br>0<br>0<br>6<br>6 | 0<br>0<br>0<br>6<br>7 | 0<br>0<br>0<br>6<br>8 | 0<br>0<br>0<br>6<br>9 | 0<br>0<br>0<br>7<br>0 | 0<br>0<br>0<br>7<br>1 | 0<br>0<br>0<br>7<br>2 |

|                     |   |   |   |   |  |   |  |   |   |   |   |   |   |   |   |   |   |   |   |  |   |   |   |   |   |
|---------------------|---|---|---|---|--|---|--|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|
| Pigment             | 2 | 2 | 1 | 1 |  | 2 |  | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 3 |  | 1 | 2 | 2 | 3 | 2 |
| White Pulp, Atrophy | 4 |   | 2 |   |  | 4 |  |   |   |   |   |   |   |   |   |   |   |   | 2 |  |   |   |   |   |   |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus          | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + |
| Atrophy         | 1 | 3 | 2 | 2 | 2 |   |   | 2 | 2 | 3 | 1 | 2 | 2 | 4 | 2 | 3 | 2 | 2 |   | 3 | 2 | 2 | 2 | 3 | 3 |
| Ectopic Thyroid |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Suppurative    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Gliosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis            | 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







Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>300 ppm Male | DAY ON TEST |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         | * TOTALS |         |     |
|--|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|-----|
|  | 0700077     | 0700078 | 0700079 | 0700080 | 0700081 | 0700082 | 0700083 | 0700084 | 0700085 | 0700086 | 0700087 | 0700088 | 0700089 | 0700090 | 0700091 | 0700092 | 0700093 | 0700094 | 0700095 | 0700096 | 0700097 | 0700098 |          | 0700099 |     |
| ANIMAL ID  | 00077       | 00078   | 00079   | 00080   | 00081   | 00082   | 00083   | 00084   | 00085   | 00086   | 00087   | 00088   | 00089   | 00090   | 00091   | 00092   | 00093   | 00094   | 00095   | 00096   | 00097   | 00098   | 00099    |         |     |
| Bile Duct, Hyperplasia                             |             |         | 1       | 1       | 1       | 1       | 2       | 1       |         |         |         |         |         | 1       | 1       |         |         |         |         |         | 1       |         |          | 18      | 1.1 |
| Mesentery  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 2       |     |
| Artery, Mineral                                    |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 2.0 |
| Oral Mucosa  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       |     |
| Pancreas   | +           | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +        | 49      |     |
| Basophilic Focus                                   |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 2       |     |
| Polyarteritis Nodosa                               |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 5       | 1.6 |
| Acinus, Atrophy                                    |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 3.0 |
| Acinus, Hyperplasia                                | 4           |         |         |         | 1       |         | 4       |         |         |         |         |         |         |         |         |         |         |         |         |         |         | 1       |          | 9       | 2.6 |
| Salivary Glands                                    | +           | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +        | 48      |     |
| Stomach, Forestomach                               | +           | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +        | 49      |     |
| Inflammation, Chronic                              |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 3.0 |
| Inflammation, Chronic Active                       |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 1.0 |
| Mineral  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 1.0 |
| Ulcer  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 1       | 2.0 |
| Epithelium, Hyperplasia                            |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 2       | 3   |
| Stomach, Glandular                                 | +           | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +       | +        | 49      |     |
| Erosion  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 2       | 1   |
| Inflammation, Acute                                |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 2       | 2.0 |
| Mineral  |             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |          | 3       | 2.0 |

**CARDIOVASCULAR SYSTEM**

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |  |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

\* .. 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







Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>300 ppm Male | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |     |     |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-----|-----|
|  | 07030       | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 | 07030 |          | 07030 | 07030 |       |     |     |
| ANIMAL ID  | 00077       | 00078 | 00079 | 00080 | 00081 | 00082 | 00083 | 00084 | 00085 | 00086 | 00087 | 00088 | 00089 | 00090 | 00091 | 00092 | 00093 | 00094 | 00095 | 00096 | 00097    | 00098 | 00099 | 00100 |     |     |
| Pigment  | 2           | 2     | 1     | 1     | 1     | 1     | 2     | 2     | 3     | 2     | 1     | 1     | 2     |       | 1     |       | 1     |       | 3     | 1     | 1        | 1     | 1     | 2     | 43  | 1.6 |
| White Pulp, Atrophy                                |             |       |       |       |       |       |       |       | 4     |       |       |       |       |       | 2     |       | 2     |       | 2     |       |          |       |       |       | 8   | 2.8 |
| Thymus   | +           | +     | +     | M     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | 46    |     |     |
| Atrophy  | 2           | 3     | 3     |       | 2     | 3     | 2     | 3     | 4     | 2     | 2     | 3     | 4     | 2     | 2     | 4     | 2     | 4     | 3     | 3     | 2        | 2     | 4     | 45    | 2.5 |     |
| Ectopic Thyroid                                    |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |          |       |       | 1     | 1.0 |     |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 48 |     |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 48 |     |
| Cyst Epithelial Inclusion    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | 1  |     |
| Inflammation, Suppurative    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 1  | 4.0 |
| Inflammation, Chronic        |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   | 3 |   |   | 2  | 3.5 |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 1  | 3.0 |

MUSCULOSKELETAL SYSTEM

|      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |  |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

NERVOUS SYSTEM

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Brain               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Gliosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hemorrhage          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2  | 1.5 |
| Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   | 1  | 2.0 |
| Necrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   | 2  | 3.5 |

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked







Experiment Number: 10188 - 02

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 06/02/2020

Test Type: CHRONIC

Di(2-ethylhexyl) Phthalate

Time Report Requested: 13:48:37

Route: DOSED FEED

CAS Number: 117-81-7

First Dose M/F: 06/27/11 / 06/28/11

Species/Strain: RATS/HSD

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1000 ppm Male | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | ANIMAL ID | males<br>(cont...) |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------|--------------------|
|   | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>7<br>2<br>9 | 0<br>7<br>3<br>0 | 0<br>6<br>7<br>5 | 0<br>7<br>2<br>9 | 0<br>6<br>1<br>7 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>0 | 0<br>7<br>3<br>0 | 0<br>7<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>6<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>6<br>9<br>8 | 0<br>7<br>2<br>9 | 0<br>5<br>5<br>7 | 0<br>7<br>3<br>0 | 0<br>6<br>4<br>5 |           |                    |
| Bile Duct, Hyperplasia                              |                  | 1                | 2                |                  | 1                | 1                |                  |                  |                  |                  | 2                |                  |                  | 1                |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |           |                    |
| Hepatocyte, Cytoplasmic Alteration                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Mesentery   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | +         |                    |
| Artery, Mineral                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2         |                    |
| Pancreas  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |           |                    |
| Inflammation, Chronic Active                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Polyarteritis Nodosa                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                | 2                |                  |           |                    |
| Acinus, Atrophy                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Acinus, Hyperplasia                                 | 4                | 3                |                  |                  |                  |                  |                  |                  |                  | 4                | 3                |                  |                  |                  | 4                |                  | 4                | 4                | 4                |                  |                  |                  |                  |                  |                  |           |                    |
| Salivary Glands                                     | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |           |                    |
| Artery, Mineral                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |           |                    |
| Stomach, Forestomach                                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |           |                    |
| Hyperplasia, Squamous                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Inflammation, Chronic                               |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Inflammation, Chronic Active                        |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |           |                    |
| Mineral   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Polyarteritis Nodosa                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Ulcer   |                  |                  |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Artery, Mineral                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |           |                    |
| Epithelium, Hyperplasia                             |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |           |                    |
| Stomach, Glandular                                  | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |           |                    |
| Mineral   |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  | 2                |                  |           |                    |
| Polyarteritis Nodosa                                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |           |                    |
| Artery, Mineral                                     |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 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



Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1000 ppm Male | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | males<br>(cont...) |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
|   | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 |                    |
| ANIMAL ID   | 3           | 3 | 3 | 3 | 3 | 2 | 3 | 7 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 9 | 2 | 5 | 3 | 4 |                    |
|   | 2           | 2 | 2 | 2 | 2 | 9 | 0 | 5 | 9 | 7 | 9 | 9 | 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 | 0 | 0 | 0 | 0 | 0 | 0 |                    |
|   | 1           | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |                    |
|   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |                    |
|   | 1           | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |                    |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Hyperplasia, Focal                                | 2 |   |   | 1 |   |   | 1 |   |   | 1 |   |   | 1 |   |   | 1 |   |   |   |   |   |   |   |   |  |
| Islets, Pancreatic Hyperplasia                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Parathyroid Gland Hyperplasia, Focal              | M | M | + | M | + | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | + | M | + |  |
| Pituitary Gland Infiltration Cellular, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Pars Distalis, Hyperplasia                        | 2 | 3 | 2 | 2 | 1 |   |   | 1 |   |   |   |   |   |   |   |   | 2 | 2 |   | 1 |   | 3 |   |   |  |
| Pars Distalis, Hypertrophy                        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |  |
| Thyroid Gland C-cell, Hyperplasia                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
|   | 4 |   |   | 3 | 3 |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 | 1 |   |   | 4 |   |  |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Epididymis                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |
| Hypospermia                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   | 3 |   |   |   |   |   | 2 |   |  |
| Inflammation, Chronic Active          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Bilateral, Hypospermia                |   |   |   |   | 3 |   |   | 3 |   | 4 |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 2 |  |
| Bilateral, Duct, Exfoliated Germ Cell |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |  |
| Duct, Exfoliated Germ Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 3 |   |  |
| Preputial Gland                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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 X .. Lesion present  
 I .. Insufficient tissue  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1000 ppm Male | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0729        | 0512  | 0732  | 0729  | 0679  | 0771  | 0771  | 0777  | 0777  | 0777  | 0777  | 0777  | 0664  | 0771  | 0777  | 0777  | 0669  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  | 0773  |          |
| ANIMAL ID   | 00126       | 00127 | 00128 | 00129 | 00130 | 00131 | 00132 | 00133 | 00134 | 00135 | 00136 | 00137 | 00138 | 00139 | 00140 | 00141 | 00142 | 00143 | 00144 | 00145 | 00146 | 00147 | 00148 | 00149 | 00150 |          |
|   | 0           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |          |
|   | 0           | 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     |          |

**ALIMENTARY SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |         |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| Esophagus                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Intestine Large, Cecum                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Intestine Large, Colon<br>Parasite Metazoan  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50<br>1 |
| Intestine Large, Rectum<br>Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50<br>9 |
| Intestine Small, Duodenum                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Intestine Small, Ileum                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Intestine Small, Jejunum                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50      |
| Basophilic Focus                             | X |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   | 4       |
| Clear Cell Focus                             | X |   | X | X |   | X |   | X | X |   | X | X |   | X | X | X |   | X | X |   | X | X | X | X | 32      |
| Degeneration, Cystic                         |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 1.0   |
| Eosinophilic Focus                           | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7       |
| Extramedullary Hematopoiesis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 3 1.0   |
| Fatty Change, Focal                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0   |
| Hepatodiaphragmatic Nodule                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Mixed Cell Focus                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1       |
| Necrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   | 1 1.0   |
| Pigment                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 5 1.2   |
| Bile Duct, Dilation                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 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  
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 1-4 .. Lesion qualified as:  
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Experiment Number: 10188 - 02

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1000 ppm Male | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | * TOTALS |
|---|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|----------|
|   | 07          | 05  | 07  | 07  | 06  | 07  | 07  | 07  | 07  | 07  | 07  | 06  | 07  | 07  | 07  | 06  | 07  | 07  | 07  | 07  | 07  | 07  | 07  | 07     |          |
| ANIMAL ID   | 001         | 002 | 003 | 004 | 005 | 006 | 007 | 008 | 009 | 010 | 011 | 012 | 013 | 014 | 015 | 016 | 017 | 018 | 019 | 020 | 021 | 022 | 023 | 024    |          |
| Bile Duct, Hyperplasia                              |             |     |     | 1   |     |     |     |     | 1   | 1   |     | 1   |     |     |     |     |     |     |     | 1   |     | 1   |     |        | 13 1.2   |
| Hepatocyte, Cytoplasmic Alteration                  |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     |        | 1 1.0    |
| Mesentery   |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 2        |
| Artery, Mineral                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 2 2.0    |
| Pancreas  | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50     |          |
| Inflammation, Chronic Active                        |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |        | 1 2.0    |
| Polyarteritis Nodosa                                |             |     | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 3 1.3    |
| Acinus, Atrophy                                     |             |     |     |     |     |     |     |     | 1   |     |     |     |     |     |     |     |     |     | 1   | 1   | 1   |     | 1   | 6 1.0  |          |
| Acinus, Hyperplasia                                 |             |     |     |     |     | 2   |     | 3   | 4   |     | 4   | 1   |     |     | 2   |     |     | 3   | 3   |     |     |     |     | 16 3.3 |          |
| Salivary Glands                                     | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50     |          |
| Artery, Mineral                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     |        | 2 1.5    |
| Stomach, Forestomach                                | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50     |          |
| Hyperplasia, Squamous                               |             |     |     |     |     |     |     |     |     |     |     | 3   |     |     |     |     |     |     |     |     |     |     |     | 1 3.0  |          |
| Inflammation, Chronic                               |             |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     | 1 2.0  |          |
| Inflammation, Chronic Active                        |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 3 2.3  |          |
| Mineral   |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     | 1 2.0  |          |
| Polyarteritis Nodosa                                |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     |     |     |     |     |     |     | 1 1.0  |          |
| Ulcer   |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2 2.5  |          |
| Artery, Mineral                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1 2.0  |          |
| Epithelium, Hyperplasia                             |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     | 3 1.7  |          |
| Stomach, Glandular                                  | +           | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 50     |          |
| Mineral   |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     | 4 2.0  |          |
| Polyarteritis Nodosa                                |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |     | 1 1.0  |          |
| Artery, Mineral                                     |             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1 4.0  |          |

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

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|   | 07          | 05     | 07     | 07     | 06     | 07     | 07     | 07     | 07     | 07     | 07     | 06     | 07     | 07     | 07     | 06     | 07     | 07     | 07     | 07     | 07     | 07     | 07     | 07     |          |
| ANIMAL ID   | 001126      | 001127 | 001128 | 001129 | 001130 | 001131 | 001132 | 001133 | 001134 | 001135 | 001136 | 001137 | 001138 | 001139 | 001140 | 001141 | 001142 | 001143 | 001144 | 001145 | 001146 | 001147 | 001148 | 001149 |          |

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |    |    |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|----|-----|-----|
| Hyperplasia, Focal   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   | 1 |   |   |   | 2 |   |   |   | 9 | 1.6 |    |    |     |     |
| Islets, Pancreatic<br>Hyperplasia  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 | 7  | 2.9 |     |
| Parathyroid Gland<br>Hyperplasia, Focal  | M | + | M | + | M | M | + | M | M | + | + | M | M | + | + | M | M | + | + | + | + | M | M | M   | +  | 31 | 1   | 3.0 |
| Pituitary Gland<br>Infiltration Cellular, Lymphocyte<br>Pars Distalis, Hyperplasia<br>Pars Distalis, Hypertrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 | 1  | 2.0 |     |
|  | 1 |   |   |   | 2 |   |   | 2 | 3 | 4 | 1 | 2 |   | 1 | 4 |   | 4 | 1 |   |   |   |   |   | 1   | 22 | 5  | 2.0 |     |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |     | 5  | 1  | 1.0 |     |
| Thyroid Gland<br>C-cell, Hyperplasia   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50 | 14 | 2.6 |     |
|  |   | 2 |   |   |   | 4 |   |   |   | 2 |   | 3 |   |   |   | 3 |   |   |   |   |   |   |   | 3   |    | 2  |     |     |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Epididymis                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |
| Hypospermia                           |   |   | 2 |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 6  | 2.5 |     |
| Inflammation, Chronic Active          |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1   | 1.0 |
| Bilateral, Hypospermia                |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 6  | 3.0 |     |
| Bilateral, Duct, Exfoliated Germ Cell |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 4  | 2.3 |     |
| Duct, Exfoliated Germ Cell            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |     |
| Preputial Gland                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 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  
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1-4 .. Lesion qualified as:  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>1000 ppm Male | DAY ON TEST |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | * TOTALS |    |     |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|-----|
|   | 07          | 05 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 |          |    |     |
| ANIMAL ID   | 00          | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |          |    |     |
| Mediastinal, Hyperplasia, Lymphocyte                |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 2        | 1  | 2.0 |
| Lymph Node, Mandibular Atrophy                      | +           | +  | +  | +  | +  | +  | +  | +  | +  | M  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 49       | 1  | 3.0 |
| Infiltration Cellular, Plasma Cell                  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 3        | 1  | 3.0 |
| Lymph Node, Mesenteric Atrophy                      | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | M  | +  | +  | +  | +  | +  | +  | +  | 49       | 1  | 3.0 |
| Spleen Extramedullary Hematopoiesis                 | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 50       | 42 | 2.0 |
| Hemorrhage  |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 3        | 2  | 3.5 |
| Pigment   | 1           |    | 2  | 1  |    | 1  | 2  | 1  | 2  | 2  | 2  | 1  | 1  | 1  | 1  | 1  | 2  | 2  | 2  | 1  |    | 2  | 1  | 1  | 42       | 42 | 1.5 |
| White Pulp, Atrophy                                 |             | 2  |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4  |    |    |    |    |    |    |    | 6        | 6  | 3.2 |
| Thymus Atrophy                                      | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | M  | +  | +  | +  | +  | +  | +  | +  | 49       | 43 | 2.3 |
|   | 2           |    | 2  | 1  |    | 2  | 3  | 2  | 3  |    | 2  | 1  | 2  | 2  | 3  | 2  |    | 2  | 2  |    | 3  | 3  | 2  | 3  | 43       | 43 | 2.3 |
| <b>INTEGUMENTARY SYSTEM</b>                         |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |     |
| Mammary Gland Galactocele                           | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 50       | 1  | 3.0 |
| Skin Cyst Epithelial Inclusion                      | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 50       | 3  |     |
| Inflammation, Chronic Active                        |             |    | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4        | 1  | 4.0 |
| <b>MUSCULOSKELETAL SYSTEM</b>                       |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |          |    |     |
| Bone  | +           | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | +  | 50       |    |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
 + .. Tissue examined microscopically  
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 I .. Insufficient tissue  
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Experiment Number: 10188 - 02

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|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
|   | 07          | 05 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 06 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 |          |
| ANIMAL ID   | 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 |          |
|   | 11          | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |          |
|   | 22          | 22 | 22 | 23 | 23 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |          |
|   | 67          | 78 | 89 | 90 | 11 | 12 | 23 | 34 | 45 | 56 | 67 | 78 | 89 | 90 | 01 | 12 | 23 | 34 | 45 | 56 | 67 | 78 | 89 | 90 |    |          |

|               |   |   |     |
|---------------|---|---|-----|
| Osteopetrosis | 2 | 2 | 2.0 |
|---------------|---|---|-----|

NERVOUS SYSTEM

|                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Edema                               |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Hemorrhage                          | 1 |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Peripheral Nerve                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Ganglion, Vacuolization Cytoplasmic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Infiltration Cellular, Histiocyte                     | 1 | 1 | 2 |   |   | 1 | 2 | 1 | 1 | 1 |   | 1 |   | 2 |   | 2 | 3 | 1 |   | 2 |   | 1 | 1 | 2 | 33 |
| Inflammation, Granulomatous                           |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   | 1 | 1 |   | 9  |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 3  |
| Mineral   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Alveolar Epithelium, Hyperplasia                      | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 2 |   |   | 5  |
| Artery, Mineral                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   | 2  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Foreign Body  |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Inflammation, Acute                                   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 | 1 |   | 1 |   |   |   | 10 |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 4 |   | 3 | 2 | 1 |   | 2 | 1 |   | 1 | 2 | 1 |   | 2 | 3 | 3 |   |   | 3 | 2 | 4 | 3 | 2 | 1 | 38 |
| Olfactory Epithelium, Metaplasia, Respiratory         |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet | 1 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   | 3  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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I .. Insufficient tissue  
M .. Missing tissue  
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Experiment Number: 10188 - 02

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3000 ppm Male | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | males<br>(cont...) |
|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|   | 0729        | 0729  | 0731  | 0728  | 0733  | 0733  | 0733  | 0731  | 0729  | 0725  | 0725  | 0720  | 0720  | 0718  | 0717  | 0716  | 0716  | 0714  | 0714  | 0711  | 0711  | 0710  | 0710  |       |                    |
| 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 |                    |
| Hyperplasia, Diffuse                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Pituitary Gland                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| Pars Distalis, Hyperplasia                          | 2           |       |       | 1     | 1     | 1     |       |       |       | 2     | 1     |       | 3     |       |       |       |       | 1     |       | 1     |       | 2     |       | 4     |                    |
| Pars Distalis, Hypertrophy                          |             |       |       |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       | 1     | 1     | 3     | 2     |       |                    |
| Thyroid Gland                                       | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     |                    |
| C-cell, Hyperplasia                                 |             |       |       |       | 1     |       |       |       |       |       |       |       | 1     |       |       |       |       | 2     |       |       |       | 1     | 1     |       |                    |
| Follicular Cell, Hyperplasia                        |             |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypospermia                              |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Bilateral, Hypospermia                   |   |   |   |   |   |   |   |   |   |   | 4 | 2 |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Preputial Gland                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active             |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |
| Prostate                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Dorsal, Epithelium, Lateral, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |
| Epithelium, Ventral, Hyperplasia         |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventral, Inflammation, Granulomatous     |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventral, Inflammation, Chronic Active    |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 2 |   |   |   |   |   |   |   |   |   |
| Seminal Vesicle                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Atrophy                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |

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

+ .. Tissue examined microscopically

X .. Lesion present

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|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0731        | 0731  | 0731  | 0733  | 0733  | 0733  | 0736  | 0736  | 0736  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  |          |
| 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 |          |
| Necrosis  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 4     | 1     |       |       |       |       |       | 6 1.8    |
| Pigment   | 2           | 2     | 2     | 2     | 2     |       |       | 2     | 2     |       | 1     | 2     | 1     | 2     | 1     | 2     |       | 2     |       | 1     | 2     | 2     | 1     | 2     | 40 1.7   |
| Bile Duct, Dilation                                 |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Bile Duct, Hyperplasia                              |             | 1     | 1     | 1     |       |       |       |       |       | 1     |       |       |       | 1     | 1     |       |       |       | 1     | 1     |       |       |       |       | 21 1.0   |
| Hepatocyte, Cytoplasmic Alteration                  | 2           |       |       |       | 1     | 1     | 1     | 1     |       | 2     |       | 2     |       |       |       | 1     |       |       | 1     |       |       | 1     | 1     | 1     | 28 1.3   |
| Hepatocyte, Hypertrophy                             |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       | 3 1.3    |
| Mesentery   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1        |
| Artery, Mineral                                     |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |
| Pancreas  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     | 1 3.0    |
| Polyarteritis Nodosa                                | 1           |       |       |       |       |       |       |       |       |       |       |       |       | 1     | 2     |       |       |       |       |       |       |       |       |       | 6 1.3    |
| Acinus, Atrophy                                     |             |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3 1.3    |
| Acinus, Hyperplasia                                 | 4           | 2     |       |       | 2     |       |       |       | 4     |       |       | 4     | 4     |       |       |       | 1     | 4     |       | 4     | 4     | 1     |       | 4     | 25 3.5   |
| Salivary Glands                                     | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Stomach, Forestomach                                | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Inflammation, Chronic Active                        |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Mineral   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Polyarteritis Nodosa                                |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1     |       |       | 1 1.0    |
| Ulcer   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 2.0    |
| Epithelium, Hyperplasia                             |             |       |       |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       |       |       |       | 2     |       |       | 3 2.7    |
| Stomach, Glandular                                  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | 50       |
| Mineral   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 1 1.0    |

CARDIOVASCULAR 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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>3000 ppm Male | DAY ON TEST |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          | * TOTALS |
|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|   | 07<br>31    | 07<br>31 | 07<br>31 | 07<br>31 | 06<br>30 | 05<br>30 | 02<br>26 | 07<br>30 | 07<br>30 | 07<br>30 | 06<br>28 | 07<br>29 | 07<br>29 | 07<br>29 | 07<br>29 | 04<br>25 | 07<br>25 | 06<br>25 | 07<br>25 | 07<br>25 | 07<br>25 | 07<br>25 | 07<br>25 | 07<br>25 |          |
| 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    |

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |       |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-------|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |  |       |
| Aneurysm     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  | 1 1.0 |
| Degeneration |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  | 1 1.0 |
| Mineral      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  | 3 1.0 |

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Cardiomyopathy       |   |   | 1 | 1 |   | 2 | 1 |   |   | 1 |   |   | 1 |   |   | 1 | 1 |   | 1 |   | 1 | 1 | 1 | 1 | 1 | 34 | 1.1 |
| Polyarteritis Nodosa |   | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.0 |
| Valve, Fibrosis      |   |   |   |   |   | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.3 |

ENDOCRINE SYSTEM

|                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Degeneration, Cystic |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Hemorrhage           |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hyperplasia, Focal   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 4  | 2.0 |
| Hypertrophy, Focal   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   |   |   |   |   |   | 1 |   |   | 6  | 1.3 |
| Metaplasia, Osseous  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Necrosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1  | 1.0 |
| Thrombus             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Medulla    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Hyperplasia, Focal |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 | 8  | 1.9 |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Atrophy            |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hyperplasia        |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.7 |

|                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Parathyroid Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | 43 |  |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

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

+ .. Tissue examined microscopically

X .. Lesion present

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|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
|   | 0731        | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  | 0731  |          | 0731  |
| 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 |

Hyperplasia, Diffuse

1 3.0

Pituitary Gland

50

Pars Distalis, Hyperplasia

21 1.9

Pars Distalis, Hypertrophy

15 1.3

Thyroid Gland

50

C-cell, Hyperplasia

8 2.0

Follicular Cell, Hyperplasia

1 1.0

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Epididymis

50

Hypospermia

3 1.7

Bilateral, Hypospermia

5 2.8

Preputial Gland

50

Inflammation, Chronic Active

1 4.0

Prostate

50

Dorsal, Epithelium, Lateral, Hyperplasia

1 1.0

Epithelium, Ventral, Hyperplasia

3 1.0

Ventral, Inflammation, Granulomatous

1 4.0

Ventral, Inflammation, Chronic Active

2 1.5

Seminal Vesicle

50

Atrophy

1 2.0

\* .. 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:

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A .. Autolysis precludes evaluation

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|---|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|   | 0731        | 0731  | 0731  | 0733  | 0733  | 0733  | 0736  | 0736  | 0736  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  |          |
| 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 |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |        |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|--------|
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 50     |
| Extramedullary Hematopoiesis | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 |   |   |   |   | 2 | 2 | 1 | 2 | 2   | 47 1.8 |
| Pigment                      | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 1 | 2 |   |   |   | 1 | 2 | 2 | 2 | 2   | 46 1.6 |
| White Pulp, Atrophy          |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   | 2 |   |   |   |   |   |   |   |     | 5 2.8  |
| Thymus                       | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | 47     |
| Atrophy                      | 2 | 2 | 2 | 2 | 2 | 3 | 4 | 2 | 2 | 1 |   | 3 | 3 | 3 | 1 | 2 | 1 | 1 | 2 | 2 | 1 | 2 |   |   | M M | 45 2.1 |

INTEGUMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |       |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50    |
| Inflammation, Acute          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 4.0 |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 2.5 |
| Epidermis, Hyperplasia       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 2.0 |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |   |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 |

NERVOUS SYSTEM

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |       |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-------|
| Brain               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |       |
| Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0 |
| Necrosis            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2 3.5 |

\* .. 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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|-------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|             | 0731                            | 0731 | 0731 | 0733 | 0733 | 0733 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 | 0736 |          |
| ANIMAL ID   | 0017                            | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017 | 0017     |

|   |   |   |     |
|---|---|---|-----|
| Nerve Trigeminal                                | 1 |   |     |
| Peripheral Nerve<br>Axon, Sciatic, Degeneration | 1 | 1 | 1.0 |
| Spinal Cord<br>Axon, Degeneration               | 1 | 1 | 1.0 |

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Infiltration Cellular, Histiocyte                     | 2 |   | 2 |   | 1 | 2 | 3 | 2 | 3 | 1 | 1 |   |   |   |   | 2 |   | 2 |   | 1 |   |   | 1 |   | 32 |    |
| Inflammation, Granulomatous                           |   | 1 |   | 1 |   |   |   |   |   | 1 |   |   |   |   | 1 |   | 1 |   | 1 |   |   |   |   |   | 10 |    |
| Inflammation, Acute                                   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Inflammation, Chronic Active                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |    |
| Alveolar Epithelium, Hyperplasia                      | 3 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 4  |    |
| Artery, Mineral                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |
| Accumulation, Hyaline Droplet                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Inflammation, Acute                                   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |    |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 4 | 1 | 1 | 2 | 1 |   |   | 2 | 3 | 1 |   | 1 | 1 | 3 | 2 | 3 | 2 | 1 | 3 |   | 3 | 3 | 2 | 3 | 1  | 44 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   | 4  |    |
| Respiratory Epithelium, Squamous Metaplasia           |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |

SPECIAL SENSES SYSTEM

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
2) Mild 4) Marked



Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male | DAY ON TEST | 0732 | 0732 | 0735 | 0732 | 0731 | 0731 | 0725 | 0731 | 0703 | 0703 | 0706 | 0711 | 0717 | 0716 | 0717 | 0717 | 0717 | 0717 | 0716 | 0722 | 0722 | 0722 | 0728 | 0730 | 0737 | 0738 | 0741 | 0747 | 0752 | 0755 |
|  | ANIMAL ID   | 0020 | 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 | 0022 | 0022 | 0022 | 0022 |
|  |             | 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    |

males (cont...)

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + |   |
| Intestine Large, Colon                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|  |   |   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Intestine Small, Duodenum                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus                             |   |   |   |   |   | X |   | X |   |   | X | X |   | X | X | X | X | X | X |   |   |   |   |   |   |   | X |   |   |   |
| Clear Cell Focus                             | X | X |   | X | X |   |   | X | X |   | X |   | X | X | X | X |   |   | X |   | X |   |   |   | X |   | X |   |   |   |
| Degeneration, Cystic                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                           |   |   | X |   |   | X |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |   |   |   | X |   |   |   |   |   |
| Hypertrophy                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                                      | 2 | 3 | 1 | 3 | 3 | 3 |   | 3 |   | 1 |   | 3 | 2 | 1 | 3 | 2 | 3 | 3 | 3 | 2 | 2 |   | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 |
| Regeneration                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Dilation                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                       |   |   | 1 |   |   | 1 |   |   |   |   |   | 1 | 1 |   |   | 1 |   | 2 |   | 1 |   |   |   |   |   |   | 1 |   |   |   |
| Hepatocyte, Cytoplasmic Alteration           | 3 | 3 |   | 1 | 4 | 3 | 3 | 4 |   | 2 |   | 1 | 1 | 4 | 3 | 2 | 3 | 2 | 4 | 2 | 2 | 3 | 1 | 4 | 1 |   |   |   |   |   |
| Hepatocyte, Hyperplasia                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male                     | DAY ON TEST      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  | ANIMAL ID | males<br>(cont...) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|-----------|--------------------|
|  | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>2 | 0<br>3<br>9<br>5 | 0<br>7<br>3<br>2 | 0<br>7<br>3<br>1 | 0<br>7<br>3<br>1 | 0<br>2<br>9<br>5 | 0<br>7<br>3<br>1 | 0<br>0<br>6<br>3 | 0<br>1<br>7<br>3 | 0<br>6<br>9<br>7 | 0<br>7<br>3<br>2 | 0<br>7<br>6<br>9 | 0<br>7<br>7<br>9 | 0<br>7<br>2<br>2 | 0<br>6<br>3<br>2 | 0<br>7<br>4<br>5 | 0<br>2<br>2<br>9 | 0<br>7<br>2<br>9 | 0<br>2<br>2<br>8 | 0<br>7<br>3<br>0 | 0<br>4<br>7<br>8 | 0<br>7<br>3<br>1 | 0<br>5<br>2<br>0 |  |           |                    |
| Hepatocyte, Hypertrophy  | 1                | 2                |                  | 1                | 1                |                  | 1                |                  |                  |                  |                  | 2                | 1                | 1                |                  | 3                |                  | 1                | 3                |                  |                  | 2                |                  |                  |  |           |                    |
| Mesentery<br>Artery, Mineral   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  |           |                    |
| Pancreas<br>Hemorrhage   | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 2                |  |           |                    |
| Hyperplasia  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |  |           |                    |
| Polyarteritis Nodosa<br>Acinus, Atrophy                                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 2                |                  |                  |                  |                  |                  |                  |                  |  |           |                    |
| Acinus, Hyperplasia<br>Duct, Inflammation, Chronic                       | 4                | 2                |                  |                  |                  |                  | 3                |                  |                  |                  |                  |                  | 4                | 2                |                  |                  |                  |                  | 3                |                  |                  |                  | 4                |                  |  |           |                    |
| Salivary Glands  | +                | +                | +                | +                | +                | +                | +                | +                | M                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |                  |  |           |                    |
| Stomach, Forestomach<br>Inflammation, Chronic Active                     | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | 2                |  |           |                    |
| Ulcer<br>Epithelium, Hyperplasia   |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  | 1                |                  | 2                |                  |                  |                  |                  |                  |                  |                  | 3                |                  |  |           |                    |
| Stomach, Glandular<br>Cyst, Squamous<br>Inflammation, Chronic<br>Mineral | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                | +                |                  |  |           |                    |

CARDIOVASCULAR SYSTEM

|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel<br>Mineral | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
|                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |

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

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males<br>(cont...) |      |      |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------------|------|------|------|
|  | 0732        | 0732 | 0735 | 0732 | 0733 | 0733 | 0733 | 0739 | 0733 | 0730 | 0733 | 0733 | 0737 | 0732 | 0739 | 0737 | 0737 | 0737 | 0736 | 0737 | 0737 | 0732 | 0732 | 0738 |           |                    | 0737 | 0734 | 0737 |
|  | 0020        | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020 | 0020      | 0020               | 0020 | 0020 | 0020 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cardiomyopathy               |   | 1 |   |   |   | 1 |   |   |   | 1 | 1 | 1 | 1 |   | 1 |   | 1 |   |   | 2 |   | 2 |   | 2 |   |   |   |   |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |
| Necrosis, Focal              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Polyarteritis Nodosa         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Artery, Mineral              |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Atrium, Thrombus             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |
| Valve, Fibrosis              |   |   |   |   |   | 1 | 1 |   | 2 |   |   |   |   |   |   |   | 1 | 3 |   |   |   |   |   |   | 2 |   | 2 |   |
| Valve, Thrombus              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 1 |   |   |   |   |   |   |   |   | 2 |   |

ENDOCRINE SYSTEM

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cytoplasmic Alteration     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| Hypertrophy, Focal         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 1 | 1 |   |   |   |   |
| Adrenal Medulla            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Focal         |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland          | + | + | + | M | M | M | + | + | M | + | + | M | + | + | M | + | + | + | + | + | + | M | M | + | + | + | + |   |
| Pituitary Gland            | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hemorrhage                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia |   | 2 |   | 1 | 1 | 2 |   |   |   |   |   | 1 |   |   | 2 |   |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |

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|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|
|  | 072         | 073   | 075   | 077   | 079   | 081   | 083   | 085   | 087   | 089   | 091   | 093   | 095   | 097   | 099   | 101   | 103   | 105   | 107   | 109   | 111   | 113   | 115   | 117   | 119   |                    |
| ANIMAL ID  | 00201       | 00202 | 00203 | 00204 | 00205 | 00206 | 00207 | 00208 | 00209 | 00210 | 00211 | 00212 | 00213 | 00214 | 00215 | 00216 | 00217 | 00218 | 00219 | 00220 | 00221 | 00222 | 00223 | 00224 | 00225 |                    |
| Pars Distalis, Hypertrophy                           | 3           | 2     | 2     | 2     | 3     | 2     |       | 3     |       | 3     | 3     | 3     | 3     | 2     | 2     | 2     | 2     |       | 3     | 3     |       | 2     | 2     | 2     | 2     |                    |
| Thyroid Gland  | +           | +     | +     | +     | +     | +     | +     |       | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                  |
| C-cell, Hyperplasia                                  |             |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |
| Follicular Cell, Hyperplasia                         |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                    |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bilateral, Hypospermia                     | 4 |   | 4 | 3 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Bilateral, Inflammation, Suppurative       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Polyarteritis Nodosa            |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Duct, Exfoliated Germ Cell      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 4 |   |
| Duct, Mineral                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| Preputial Gland                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Prostate                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Dorsal, Lateral, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Dorsal, Lateral, Inflammation, Acute       |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| Dorsal, Lateral, Inflammation, Chronic     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Epithelium, Ventral, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Ventral, Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Ventral, Inflammation, Chronic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |
| Ventral, Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   | 2 |   |

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





Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST    | HARLAN SPRAGUE DAWLEY RATS MALE |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | ANIMAL ID | males (cont...) |      |
|----------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-----------------|------|
|                | 0732                            | 0733 | 0735 | 0737 | 0739 | 0741 | 0743 | 0745 | 0747 | 0749 | 0751 | 0753 | 0755 | 0757 | 0759 | 0761 | 0763 | 0765 | 0767 | 0769 | 0771 | 0773 | 0775 | 0777 |           |                 | 0779 |
| 10000 ppm Male | 0                               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0         | 0020            |      |

Necrosis

4

4

2

**RESPIRATORY SYSTEM**

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Infiltration Cellular, Histiocyte                   | 1 | 1 | 1 | 2 | 2 | 2 |   | 2 |   | 1 |   |   |   |   | 2 |   | 1 | 2 | 2 | 2 | 1 |   | 1 | 2 | 2 |  |
| Inflammation, Granulomatous                         |   |   |   |   |   | 1 |   | 2 |   |   |   |   |   |   |   |   | 1 | 1 |   | 1 | 1 |   |   |   | 1 |  |
| Inflammation, Chronic Active                        |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Alveolar Epithelium, Hyperplasia                    |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |  |
| Artery, Mineral                                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Foreign Body  |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Suppurative                           |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Inflammation, Acute                                 |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |
| Glands, Respiratory Epithelium, Dilation            |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet | 3 | 1 |   |   | 1 | 3 | 2 | 1 |   |   |   | 3 |   | 4 | 3 | 1 | 4 | 1 | 3 | 3 |   | 2 | 1 | 2 | 1 |  |
| Olfactory Epithelium, Metaplasia, Respiratory       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| Respiratory Epithelium, Hyperplasia                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |  |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |  |
| Inflammation, Chronic Active                        |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |  |

**SPECIAL SENSES SYSTEM**

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye                                    | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Bilateral, Cornea, Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |
| Cornea, Inflammation, Acute            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Retina, Degeneration                   |   |   |   |   | 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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST                          | 0 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|--|--|--|--|
|                                      | 7 | 7 | 3 | 7 | 7 | 7 | 2 | 7 | 0 | 6 | 1 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 4 | 7 | 5 |   |   |  |   |  |  |  |  |  |
| <b>HARLAN SPRAGUE DAWLEY RATS</b>    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| <b>MALE</b>                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| <b>10000 ppm Male</b>                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| 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 |   |   |  |   |  |  |  |  |  |
|                                      | 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 |   |  |   |  |  |  |  |  |
| Harderian Gland                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |   |  |  |  |  |  |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |  |   |  |  |  |  |  |
| <b>URINARY SYSTEM</b>                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Kidney                               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |   |  |  |  |  |  |
| Infarct                              | 1 |   |   |   |   | 1 |   | 1 |   |   | 1 |   |   | 1 |   |   |   | 1 |   | 2 |   | 1 |   |   |   |   |  |   |  |  |  |  |  |
| Inflammation, Acute                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Inflammation, Chronic Active         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Mineral                              |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |  |   |  |  |  |  |  |
| Nephropathy, Chronic Progressive     | 2 | 2 | 2 | 1 | 1 | 3 | 1 | 3 |   |   |   | 1 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 2 | 3 | 1 | 2 | 1 | 3 | 1 |  |   |  |  |  |  |  |
| Artery, Mineral                      |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Cortex, Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Epithelium, Papilla, Hyperplasia     | 1 |   | 1 |   |   | 1 |   | 1 |   |   |   |   |   | 2 |   | 1 | 2 |   |   |   |   | 1 |   | 2 |   |   |  |   |  |  |  |  |  |
| Papilla, Edema                       | 3 | 1 | 2 | 2 |   | 2 | 1 | 2 |   | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |   | 2 | 1 |   | 2 | 2 | 1 | 2 |   |  |   |  |  |  |  |  |
| Papilla, Hemorrhage                  | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Pelvis, Dilatation                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Pelvis, Inflammation, Acute          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Pelvis, Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |  |   |  |  |  |  |  |
| Renal Tubule, Cyst                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | X |  |  |  |  |  |
| Urinary Bladder                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |   |  |   |  |  |  |  |  |
| Inflammation, Chronic                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |  |   |  |  |  |  |  |

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X .. Lesion present  
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Experiment Number: 10188 - 02  
Test Type: CHRONIC  
Route: DOSED FEED  
Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Di(2-ethylhexyl) Phthalate  
CAS Number: 117-81-7

Date Report Requested: 06/02/2020  
Time Report Requested: 13:48:37  
First Dose M/F: 06/27/11 / 06/28/11  
Lab: BAT

| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS<br>MALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|-------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|             | 10000 ppm Male                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
| ANIMAL ID   | 00226                              | 00227 | 00228 | 00229 | 00230 | 00231 | 00232 | 00233 | 00234 | 00235 | 00236 | 00237 | 00238 | 00239 | 00240 | 00241 | 00242 | 00243 | 00244 | 00245 | 00246 | 00247 | 00248 | 00249 | 00250 | 00251 |          |

**ALIMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        |       |    |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------|-------|----|
| Esophagus                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +      | +     | 50 |
| Intestine Large, Cecum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 48    |    |
| Intestine Large, Colon             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Intestine Large, Rectum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Parasite Metazoan                  |   | X | X | X |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |        | 7     |    |
| Intestine Small, Duodenum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Intestine Small, Ileum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Intestine Small, Jejunum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Liver                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | +      | 49    |    |
| Basophilic Focus                   |   |   |   | X |   |   |   |   |   |   |   | X | X | X | X |   |   |   |   |   | X |   |   |   | X |        | 17    |    |
| Clear Cell Focus                   |   | X | X | X |   |   |   | X | X | X |   | X | X |   | X | X | X | X |   |   | X |   |   |   | X |        | 28    |    |
| Degeneration, Cystic               |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |        | 2 1.0 |    |
| Eosinophilic Focus                 |   |   |   | X |   |   |   | X |   |   |   |   | X |   |   |   |   |   | X | X |   |   |   | X |   | 11     |       |    |
| Hypertrophy                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 3.0 |    |
| Necrosis                           |   |   | 1 |   | 2 |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   | 13 1.3 |       |    |
| Pigment                            |   | 3 | 3 | 3 | 1 |   |   | 3 | 3 | 3 |   | 3 | 3 | 3 | 3 | 2 | 2 |   | 2 | 3 |   |   |   | 3 |   | 38 2.5 |       |    |
| Regeneration                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 2.0 |    |
| Bile Duct, Dilatation              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 3.0 |    |
| Bile Duct, Hyperplasia             |   |   | 1 |   |   | 1 | 1 | 1 |   |   |   |   |   |   |   | 1 | 1 |   |   |   |   |   |   | 1 |   | 15 1.1 |       |    |
| Hepatocyte, Cytoplasmic Alteration |   | 3 | 2 | 3 |   |   |   | 3 | 3 | 2 |   | 3 | 2 | 3 | 2 | 3 | 1 | 3 |   | 3 |   |   |   | 3 |   | 37 2.6 |       |    |
| Hepatocyte, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |        | 1 3.0 |    |

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X .. Lesion present  
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1) Minimal 3) Moderate  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male | DAY ON TEST |     | ANIMAL ID |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | * TOTALS |       |
|--|-------------|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|----------|-------|
|  | 0-4         | 0-7 | 0-7       | 0-7 | 0-2 | 0-0 | 0-0 | 0-7 | 0-7 | 0-7 | 0-2 | 0-7 | 0-7 | 0-7 | 0-7 | 0-7 | 0-7 | 0-0 | 0-7 | 0-7 | 0-0 | 0-0 | 0-0 | 0-7 | 0-7 | 0-0 | 0-0 | 0-0 | 0-7 |        |          |       |
| Hepatocyte, Hypertrophy                              | 1           |     |           |     |     |     |     | 2   | 2   |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   | 17 1.6 |          |       |
| Mesentery  |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   |        |          |       |
| Artery, Mineral                                      |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1   | 2.0    |          |       |
| Pancreas   | +           | +   | +         | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | M   | +   | 49     |          |       |
| Hemorrhage   |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1      | 2.0      |       |
| Hyperplasia  |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1      | 1.0      |       |
| Polyarteritis Nodosa                                 |             |     | 2         |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2      | 2.5      |       |
| Acinus, Atrophy                                      |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1      | 2.0      |       |
| Acinus, Hyperplasia                                  |             |     | 2         |     |     |     |     |     |     |     |     |     | 4   |     |     | 4   |     |     | 4   | 3   |     |     |     |     | 2   |     | 4   |     | 4   | 15 3.3 |          |       |
| Duct, Inflammation, Chronic                          |             |     | 4         |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1      | 4.0      |       |
| Salivary Glands                                      | +           | +   | +         | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | 49     |          |       |
| Stomach, Forestomach                                 | +           | +   | +         | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | M   | +      | 49       |       |
| Inflammation, Chronic Active                         |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 1        | 2.0   |
| Ulcer  |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 1        | 1.0   |
| Epithelium, Hyperplasia                              |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 6        | 2.0   |
| Stomach, Glandular                                   | +           | +   | +         | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | M   | +      | 49       |       |
| Cyst, Squamous                                       |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 1        |       |
| Inflammation, Chronic                                |             |     | 1         |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 1        | 1.0   |
| Mineral  |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2      | 2.0      |       |
| <b>CARDIOVASCULAR SYSTEM</b>                         |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        |          |       |
| Blood Vessel   | +           | +   | +         | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | +   | M   | +      | 49       |       |
| Mineral  |             |     |           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |        | 4        | 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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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male | DAY ON TEST |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | * TOTALS |
|--|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
|  | 04          | 07  | 07  | 07  | 07  | 02  | 00  | 00  | 07  | 07  | 07  | 02  | 07  | 07  | 07  | 07  | 07  | 07  | 07  | 00  | 07  | 07  | 00  | 00  | 00  |          |
| ANIMAL ID  | 133         | 030 | 030 | 032 | 026 | 003 | 009 | 032 | 032 | 000 | 005 | 001 | 001 | 007 | 002 | 003 | 002 | 001 | 002 | 003 | 002 | 009 | 003 | 005 | 003 |          |
|  | 002         | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 | 002 |          |
|  | 26          | 77  | 88  | 99  | 00  | 11  | 22  | 33  | 33  | 44  | 55  | 66  | 77  | 88  | 99  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |
| Cardiomyopathy               | 1 | 1 | 1 |   |   |   | 2 |   | 1 | 1 | 2 |   |   |   | 1 |   |   | 1 |   |   |   |   |   |   | 21 | 1.2 |
| Inflammation, Chronic Active | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Mineral Necrosis             |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Necrosis, Focal              | 2 |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   | 1  | 2.0 |
| Polyarteritis Nodosa         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   | 1  | 1.0 |
| Artery, Mineral              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Atrium, Thrombus             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Valve, Fibrosis              |   |   |   |   |   |   |   |   | 3 |   | 1 |   |   |   | 1 | 2 |   |   |   |   |   |   |   |   | 11 | 1.7 |
| Valve, Thrombus              |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   | 1 |   |   |   |   |   | 3 |   |   | 6  | 1.8 |

ENDOCRINE SYSTEM

|                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Adrenal Cortex             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |
| Cytoplasmic Alteration     |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Degeneration, Cystic       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   | 3  | 1.0 |
| Hypertrophy, Focal         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.3 |
| Adrenal Medulla            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |
| Hyperplasia, Focal         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 | 2  | 1.5 |
| Islets, Pancreatic         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |
| Hyperplasia                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Parathyroid Gland          | + | + | + | M | + | M | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |     |
| Pituitary Gland            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Hemorrhage                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Pars Distalis, Hyperplasia |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   |   |   | 4 |   |   |   | 1 |   |   |   |   | 14 | 1.4 |

\* .. 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  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>MALE<br>10000 ppm Male | DAY ON TEST           |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | * TOTALS |     |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|-----|
|  | 0<br>4<br>1<br>3      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>0      | 0<br>7<br>3<br>2      | 0<br>2<br>0<br>6      | 0<br>0<br>9<br>3      | 0<br>0<br>3<br>9      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>0      | 0<br>2<br>3<br>5      | 0<br>7<br>3<br>1      | 0<br>7<br>3<br>1      | 0<br>7<br>7<br>7      | 0<br>7<br>3<br>2      | 0<br>7<br>2<br>3      | 0<br>7<br>2<br>1      | 0<br>7<br>2<br>9      | 0<br>7<br>3<br>0      | 0<br>7<br>2<br>9      | 0<br>0<br>0<br>3      | 0<br>0<br>0<br>2      | 0<br>0<br>0<br>5      | 0<br>0<br>0<br>3      | 0<br>0<br>0<br>7      |          |     |
| ANIMAL ID  | 0<br>0<br>2<br>2<br>6 | 0<br>0<br>2<br>2<br>7 | 0<br>0<br>2<br>2<br>8 | 0<br>0<br>2<br>2<br>9 | 0<br>0<br>2<br>3<br>0 | 0<br>0<br>2<br>3<br>1 | 0<br>0<br>2<br>3<br>2 | 0<br>0<br>2<br>3<br>3 | 0<br>0<br>2<br>3<br>4 | 0<br>0<br>2<br>3<br>5 | 0<br>0<br>2<br>3<br>6 | 0<br>0<br>2<br>3<br>7 | 0<br>0<br>2<br>3<br>8 | 0<br>0<br>2<br>3<br>9 | 0<br>0<br>2<br>4<br>0 | 0<br>0<br>2<br>4<br>1 | 0<br>0<br>2<br>4<br>2 | 0<br>0<br>2<br>4<br>3 | 0<br>0<br>2<br>4<br>4 | 0<br>0<br>2<br>4<br>5 | 0<br>0<br>2<br>4<br>6 | 0<br>0<br>2<br>4<br>7 | 0<br>0<br>2<br>4<br>8 | 0<br>0<br>2<br>4<br>9 | 0<br>0<br>2<br>4<br>0 |          |     |
| Pars Distalis, Hypertrophy                           | 3                     | 3                     | 2                     | 2                     | 3                     |                       |                       | 2                     | 3                     | 2                     | 1                     | 3                     | 2                     |                       | 3                     | 2                     | 2                     |                       | 2                     |                       |                       |                       |                       |                       | 2                     | 37       | 2.4 |
| Thyroid Gland  | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | +                     | 50       |     |
| C-cell, Hyperplasia                                  |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1                     |                       |                       |                       |                       |                       | 2        | 1.5 |
| Follicular Cell, Hyperplasia                         |                       |                       |                       | 2                     |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       |                       | 1        | 2.0 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Epididymis                                 | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |     |
| Bilateral, Hypospermia                     | 4 | 4 | 4 | 4 | 4 |   | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |   |   | 4 | 43 | 4.0 |     |
| Bilateral, Inflammation, Suppurative       |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Bilateral, Polyarteritis Nodosa            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 1.0 |
| Bilateral, Duct, Exfoliated Germ Cell      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 3.0 |
| Duct, Mineral                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 1.0 |
| Preputial Gland                            | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 48 |     |     |
| Prostate                                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49 |     |     |
| Dorsal, Lateral, Inflammation, Suppurative |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 4.0 |
| Dorsal, Lateral, Inflammation, Acute       |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 1.0 |
| Dorsal, Lateral, Inflammation, Chronic     |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 1.0 |
| Epithelium, Ventral, Hyperplasia           |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |   |    | 3   | 1.0 |
| Ventral, Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |    | 1   | 1.0 |
| Ventral, Inflammation, Chronic             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 3.0 |
| Ventral, Inflammation, Chronic Active      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.5 |

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|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|---|
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |   |   |   |
| ANIMAL ID  | 4           | 7 | 7 | 7 | 2 | 0 | 0 | 7 | 7 | 7 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 0 | 7 | 7        | 0 | 0 | 0 | 7 |
|  | 1           | 3 | 3 | 3 | 2 | 0 | 9 | 3 | 3 | 3 | 9 | 3 | 3 | 1 | 3 | 2 | 3 | 2 | 0 | 3 | 2        | 0 | 0 | 0 | 2 |
|  | 3           | 0 | 0 | 2 | 6 | 3 | 9 | 2 | 2 | 0 | 5 | 1 | 1 | 7 | 2 | 7 | 1 | 9 | 3 | 0 | 9        | 3 | 5 | 3 | 9 |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0 |
|  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 0 | 0 | 0 |
|  | 2           | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2        | 2 | 2 | 2 | 2 |
|  | 2           | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 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 |

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |  |     |  |     |  |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|--|-----|--|-----|--|
| Atrophy                        |   |   |   |   | 4 |   |   |   |   |   |   |   | 4 |   |   |   | 2 |   | 3 |   | 2 |   | 5 |   | 3.0 |  |     |  |     |  |
| Lymph Node, Mesenteric Atrophy | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + | 48  |  | 6   |  | 2.3 |  |
| Spleen                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 49  |  |     |  |     |  |
| Extramedullary Hematopoiesis   | 3 | 1 | 1 | 2 |   |   |   | 2 |   |   | 3 | 2 | 2 |   | 2 | 2 | 2 | 2 |   | 2 | 1 | 1 |   | 2 | 36  |  | 1.8 |  |     |  |
| Pigment                        | 1 | 1 | 1 | 1 | 2 |   | 1 |   | 1 | 1 |   | 2 | 2 | 3 | 1 | 2 | 1 | 1 |   | 1 | 1 |   |   | 1 | 38  |  | 1.3 |  |     |  |
| White Pulp, Atrophy            | 2 |   |   |   | 2 | 3 |   |   |   |   |   |   |   | 4 |   |   |   |   | 2 |   | 3 |   |   | 4 | 9   |  | 2.7 |  |     |  |
| White Pulp, Hyperplasia        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1   |  | 2.0 |  |     |  |
| Thymus                         | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 47  |  |     |  |     |  |
| Atrophy                        | 3 | 1 | 2 | 1 | 1 |   | 4 | 2 | 2 | 3 |   | 1 | 4 |   | 2 | 3 | 2 | 2 |   | 2 | 3 |   |   | 1 | 36  |  | 2.1 |  |     |  |
| Atrophy, Lymphocyte            |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   | 4 | 3 |   | 5   |  | 2.8 |  |     |  |

INTEGUMENTARY SYSTEM

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

MUSCULOSKELETAL SYSTEM

|                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |     |  |  |  |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-----|--|--|--|
| Bone                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |  |     |  |  |  |
| Cartilage, Joint, Degeneration |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |  | 1.0 |  |  |  |

NERVOUS SYSTEM

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |     |  |  |  |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|-----|--|--|--|
| Brain               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |  |     |  |  |  |
| Gliosis             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |  | 2.0 |  |  |  |
| Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 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





Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST | 0737  | 0737  | 0725  | 0724  | 0765  | 0777  | 0743  | 0774  | 0775  | 0775  | 0775  | 0765  | 0766  | 0779  | 0777  | 0773  | 0772  | 0772  | 0764  | 0773  | 0772  | 0773  | 0758  | 0736  | females<br>(cont...) |
|  | ANIMAL ID   | 00251 | 00252 | 00253 | 00254 | 00255 | 00256 | 00257 | 00258 | 00259 | 00260 | 00261 | 00262 | 00263 | 00264 | 00265 | 00266 | 00267 | 00268 | 00269 | 00270 | 00271 | 00272 | 00273 | 00274 |                      |

ALIMENTARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon<br>Parasite Metazoan         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Parasite Metazoan        | + | + | + | + | + | + | + | + | X | + | + | X | + | + | + | + | + | + | + | X | + | + | + | + | + |
| Intestine Small, Duodenum                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum<br>Hyperplasia, Lymphocyte | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                                    |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cholangiofibrosis                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus                                    |   |   |   |   |   |   | X |   | X | X |   |   |   |   |   |   |   |   | X |   | X |   |   |   |   |
| Eosinophilic Focus                                  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |
| Extramedullary Hematopoiesis                        |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   |   |   |   | 1 |   |   |   |   |
| Hepatodiaphragmatic Nodule                          |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bile Duct, Hyperplasia                              | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 10188 - 02

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 0737        | 0737  | 0725  | 0724  | 0765  | 0777  | 0774  | 0746  | 0777  | 0777  | 0777  | 0777  | 0766  | 0766  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0756  | 0753  | 0738  |                      |
| ANIMAL ID  | 00251       | 00252 | 00253 | 00254 | 00255 | 00256 | 00257 | 00258 | 00259 | 00260 | 00261 | 00262 | 00263 | 00264 | 00265 | 00266 | 00267 | 00268 | 00269 | 00270 | 00271 | 00272 | 00273 | 00274 | 00275                |

|                              |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Mesentery                    | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pancreas                     | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Basophilic Focus             | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Polyarteritis Nodosa         | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acinus, Atrophy              | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salivary Glands              | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Forestomach         | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inflammation, Chronic Active | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ulcer                        | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Epithelium, Hyperplasia      | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stomach, Glandular           | +   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mineral                      | 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Glands, Dysplasia            | 1   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

CARDIOVASCULAR SYSTEM

|                |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Blood Vessel   | +           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Heart          | +           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cardiomyopathy | 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

ENDOCRINE SYSTEM

|                      |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Adrenal Cortex       | +           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Angiectasis          | +           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Degeneration, Cystic | 1 1 1 1 1 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST | 0737  | 0737  | 0725  | 0724  | 0735  | 0777  | 0746  | 0774  | 0777  | 0777  | 0777  | 0777  | 0766  | 0766  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0777  | 0755  | 0733  | females<br>(cont...) |
|  | ANIMAL ID   | 00251 | 00252 | 00253 | 00254 | 00255 | 00256 | 00257 | 00258 | 00259 | 00260 | 00261 | 00262 | 00263 | 00264 | 00265 | 00266 | 00267 | 00268 | 00269 | 00270 | 00271 | 00272 | 00273 | 00274 |                      |

Hemorrhage  
Necrosis

4

1

RESPIRATORY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia, Lymphocyte<br>Infiltration Cellular, Histiocyte<br>Inflammation, Granulomatous<br>Inflammation, Chronic Active<br>Alveolar Epithelium, Hyperplasia<br>Bronchiole, Hyperplasia | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 2 | 2 | 3 |   | 2 | 2 | 2 | 2 | 2 | 1 | 3 |   | 2 | 1 | 2 |
|  |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
|  |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| Nose   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Olfactory Epithelium, Accumulation, Hyaline<br>Droplet   | 1 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 2 | 2 |
| Respiratory Epithelium, Accumulation, Hyaline<br>Droplet   |   |   |   |   |   | 1 |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   |   | 1 |   |   |   |   | 1 |
| Trachea  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye                                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lens, Cataract                            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Retina, Degeneration<br>Retina, Dysplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Harderian Gland                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

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|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST | 0737  | 0737  | 0725  | 0724  | 0765  | 0777  | 0746  | 0774  | 0777  | 0777  | 0777  | 0766  | 0766  | 0777  | 0777  | 0777  | 0777  | 0766  | 0777  | 0777  | 0753  | 0753  | females<br>(cont...) |
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|  |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                      |

Atrophy 2

Lacrimal Gland +

URINARY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                                      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nephropathy, Chronic Progressive            | 1 | 1 | 1 |   | 2 | 1 | 1 | 3 | 2 | 1 | 1 |   | 2 | 1 | 1 | 1 | 1 | 1 |   | 1 | 1 | 1 | 1 |
| Epithelium, Papilla, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
| Papilla, Necrosis                           |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Renal Tubule, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 3 |   |   |
| Urinary Bladder                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

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| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|-------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|             | 0689                              | 0736  | 0736  | 0445  | 0742  | 0772  | 0772  | 0772  | 0772  | 0664  | 0664  | 0772  | 0772  | 0772  | 0550  | 0550  | 0550  | 0773  | 0773  | 0773  | 0556  | 0773  | 0773  | 0773  |          |
| ANIMAL ID   | 00276                             | 00077 | 00088 | 00099 | 00010 | 00011 | 00012 | 00013 | 00014 | 00015 | 00016 | 00017 | 00018 | 00019 | 00020 | 00021 | 00022 | 00023 | 00024 | 00025 | 00026 | 00027 | 00028 | 00029 |          |

Mesentery 1

Pancreas + + + A + 49

Basophilic Focus X 1

Polyarteritis Nodosa 1 1.0

Acinus, Atrophy 1 1.0

Salivary Glands + + + M + 49

Stomach, Forestomach + 50

Inflammation, Chronic Active 2 2 1.5

Ulcer 1 2.0

Epithelium, Hyperplasia 2 4 1.5

Stomach, Glandular + 50

Mineral 1 6 1.0

Glands, Dysplasia 1 1.0

CARDIOVASCULAR SYSTEM

Blood Vessel + + + M + 49

Heart + + + M + 49

Cardiomyopathy 1 1 1 10 1.0

ENDOCRINE SYSTEM

Adrenal Cortex + 50

Angiectasis 2 1 2.0

Degeneration, Cystic 1 2 1 1 1 1 1 12 1.1

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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|  | 0689        | 0736  | 0736  | 0445  | 0742  | 0772  | 0772  | 0772  | 0772  | 0664  | 0664  | 0772  | 0772  | 0772  | 0556  | 0556  | 0556  | 0773  | 0773  | 0773  | 0556  | 0773  | 0773  | 0773  |          |
| ANIMAL ID  | 00276       | 00077 | 00078 | 00009 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 | 00000 |          |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |  |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|--|
| Extramedullary Hematopoiesis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 1.0 |  |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |  |
| Thrombus                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 2.0 |  |
| Adrenal Medulla              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |     |  |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1   | 2.0 |  |
| Islets, Pancreatic           | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |     |  |
| Hyperplasia                  |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.7 |     |  |
| Parathyroid Gland            | + | + | + | M | + | + | + | + | M | M | + | + | M | + | + | + | + | + | + | + | + | + | M | 42 |     |     |  |
| Pituitary Gland              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | +  | +   | 49  |  |
| Pars Distalis, Hyperplasia   | 1 | 3 | 3 |   |   | 1 |   |   | 1 |   |   |   | 2 | 3 |   |   |   |   | 3 | 3 |   |   | 2 | 2  | 19  | 2.3 |  |
| Thyroid Gland                | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 49  |     |  |
| C-cell, Hyperplasia          |   |   |   |   |   | 1 |   |   |   | 3 |   | 1 | 4 |   |   |   |   |   | 3 | 1 |   |   |   | 1  | 14  | 1.9 |  |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|
| Clitoral Gland               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1  | 4.0 |
| Ovary                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |
| Bilateral, Atrophy           | 3 | 2 | 2 | 3 |   |   | 3 | 2 |   | 3 | 3 | 2 | 4 | 2 | 3 |   |   |   | 2 | 3 | 3 | 2 | 2 | 3  | 40 | 2.6 |
| Bilateral, Follicle, Cyst    |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |    |     |
| Bursa, Cyst                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   | 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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>0 ppm Female | DAY ON TEST | 0689  | 0736  | 0736  | 0445  | 0742  | 0772  | 0772  | 0772  | 0772  | 0664  | 0664  | 0772  | 0772  | 0772  | 0550  | 0550  | 0550  | 0773  | 0773  | 0773  | 0773  | 0551  | 0776  | 0775  | 0775  | * TOTALS |
|  | ANIMAL ID   | 00276 | 00277 | 00278 | 00279 | 00280 | 00281 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 | 00282 |          |

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Follicle, Cyst                     | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 9  |     |
| Paraovarian Tissue, Cyst           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |
| Uterus                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Adenomyosis                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Cyst, Squamous                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |     |
| Dilation                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 3.7 |
| Hyperplasia, Stromal               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |
| Inflammation, Suppurative          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 2.5 |
| Inflammation, Chronic Active       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.0 |
| Thrombus                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Endometrium, Hyperplasia, Atypical |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |
| Endometrium, Hyperplasia, Cystic   | 1 | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 27 | 1.7 |
| Endometrium, Squamous Metaplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 25 | 1.9 |
| Vagina                             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Prolapse                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |     |

HEMATOPOIETIC SYSTEM

|                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Bone Marrow            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Congestion             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hypercellularity       | 4 | 2 | 2 | 4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 39 | 2.8 |
| Myelofibrosis          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Lymph Node, Mandibular | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Lymph Node, Mesenteric | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |     |
| Atrophy                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |
| Hemorrhage             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 3.0 |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 10188 - 02

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Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|-------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|             | 0689                              | 0736  | 0736  | 0445  | 0743  | 0733  | 0733  | 0733  | 0735  | 0664  | 0662  | 0733  | 0733  | 0733  | 0560  | 0562  | 0564  | 0736  | 0736  | 0571  |          | 0733  | 0735  |       |       |
| ANIMAL ID   | 00276                             | 00277 | 00278 | 00279 | 00280 | 00281 | 00282 | 00283 | 00284 | 00285 | 00286 | 00287 | 00288 | 00289 | 00290 | 00291 | 00292 | 00293 | 00294 | 00295 | 00296    | 00297 | 00298 | 00299 | 00300 |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |     |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|-----|-----|
| Spleen                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 49 |     |     |     |     |
| Extramedullary Hematopoiesis | 4 | 2 | 2 | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 44  | 2.3 |     |     |
| Hemorrhage                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  | 1   | 4.0 |     |     |
| Pigment                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2   | 1   | 37  | 1.5 |
| White Pulp, Atrophy          | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2   | 7   | 2.3 |     |
| Thymus                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 46 |     |     |     |     |
| Atrophy                      | 3 | 3 | 1 | M | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | M | + | + | 45 | 2.0 |     |     |     |

INTEGUMENTARY SYSTEM

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |     |    |     |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|-----|----|-----|
| Mammary Gland                           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |     |     |    |     |
| Galactocele                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4  | 2   | 4.0 |    |     |
| Hyperplasia                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  | 1   | 1   | 16 | 1.6 |
| Infiltration Cellular, Mononuclear Cell |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 3.0 |     |    |     |
| Inflammation, Chronic                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 2.0 |     |    |     |
| Skin                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |     |     |    |     |

MUSCULOSKELETAL SYSTEM

|                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |     |  |
|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|-----|--|
| Bone            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |     |  |
| Osteopetrosis   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 4.0 |  |
| Skeletal Muscle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2  |     |  |
| Hemorrhage      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1  | 4.0 |  |

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





Experiment Number: 10188 - 02

Test Type: CHRONIC

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

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Lab: BAT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>300 ppm Female | DAY ON TEST | 0655  | 0732  | 0732  | 0732  | 0675  | 0775  | 0775  | 0775  | 0775  | 0775  | 0775  | 0775  | 0775  | 0528  | 0737  | 0472  | 0741  | 0430  | 0735  | 0735  | 0735  | 0585  | 0732  | females<br>(cont...) |
|  | ANIMAL ID   | 00301 | 00302 | 00303 | 00304 | 00305 | 00306 | 00307 | 00308 | 00309 | 00310 | 00311 | 00312 | 00313 | 00314 | 00315 | 00316 | 00317 | 00318 | 00319 | 00320 | 00321 | 00322 | 00323 |                      |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum<br>Parasite Metazoan                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon<br>Parasite Metazoan                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Parasite Metazoan<br>Polyarteritis Nodosa | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum<br>Inflammation, Chronic Active            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basophilic Focus   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Clear Cell Focus   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hepatodiaphragmatic Nodule   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mixed Cell Focus   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. 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





Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>300 ppm Female | DAY ON TEST | 0655  | 0732  | 0732  | 0732  | 0679  | 0735  | 0735  | 0735  | 0737  | 0737  | 0737  | 0737  | 0737  | 0737  | 0528  | 0737  | 0477  | 0721  | 0415  | 0736  | 0509  | 0735  | 0735  | 0735  | 0585  | 0732  | females<br>(cont...) |
|  | ANIMAL ID   | 00301 | 00302 | 00303 | 00304 | 00305 | 00306 | 00307 | 00308 | 00309 | 00310 | 00311 | 00312 | 00313 | 00314 | 00315 | 00316 | 00317 | 00318 | 00319 | 00320 | 00321 | 00322 | 00323 | 00324 | 00325 | 00326 |                      |
|  |             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |                      |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + |
| Ovary                                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pigment                                   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Bilateral, Atrophy                        | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 1 | 3 |   | 2 | 2 |   |   | 2 | 2 |   | 3 | 1 | 3 |   |   |   |   | 2 | 3 |
| Bursa, Cyst                               |   |   | X |   | X |   |   |   |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst                            |   |   |   | X |   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   | X |   |   |   |   |
| Germinal Epithelium, Cyst                 |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Interstitial Cell, Hyperplasia            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Paraovarian Tissue, Inflammation, Chronic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Rete Ovarii, Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Uterus                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenomyosis                               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Dilation                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thrombus                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia, Atypical        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia, Cystic          | 2 | 1 | 2 | 2 | 2 | 2 | 2 |   | 2 |   | 1 | 1 |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 |
| Endometrium, Squamous Metaplasia          |   | 1 |   | 2 | 3 | 2 | 1 |   |   |   | 1 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 2 |
| Vagina                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Chronic Active              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

\* .. 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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2) Mild 4) Marked











Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>300 ppm Female | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|  | 0592        | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 | 0732 |          |
| ANIMAL ID  | 0032        | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033 | 0033     |
| Bile Duct, Cyst  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Bile Duct, Hyperplasia                                 | 1           |      |      | 1    | 1    |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Endothelial Cell, Hypertrophy                          |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Hepatocyte, Cytoplasmic Alteration                     |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Hepatocyte, Hypertrophy                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Mesentery  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Fat, Necrosis  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Pancreas   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        |
| Polyarteritis Nodosa                                   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Acinus, Atrophy  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Salivary Glands  | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        |
| Stomach, Forestomach                                   | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        |
| Inflammation, Acute                                    |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Epithelium, Hyperplasia                                |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Epithelium, Hyperplasia, Atypical                      |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Stomach, Glandular                                     | +           | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +        |
| Inflammation, Chronic Active                           |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Mineral  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
| Ulcer  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |

**CARDIOVASCULAR SYSTEM**

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

\* .. 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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST    | HARLAN SPRAGUE DAWLEY RATS FEMALE |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |   |    |     |     |
|----------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|----|-----|-----|
|                | 0                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0 |    |     |     |
| 5              | 7                                 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 3 | 7 | 7 | 7 | 2 | 4 | 7 | 7 | 7 | 7 | 7 | 6 | 7        | 5 | 7 | 12 | 1.0 |     |
| 9              | 3                                 | 3 | 3 | 3 | 3 | 3 | 3 | 7 | 9 | 0 | 0 | 3 | 8 | 9 | 1 | 3 | 3 | 3 | 3 | 9 | 3        | 2 | 3 |    |     |     |
| 2              | 2                                 | 2 | 2 | 7 | 7 | 7 | 7 | 7 | 6 | 1 | 1 | 2 | 8 | 7 | 3 | 6 | 6 | 6 | 6 | 6 | 6        | 6 | 5 | 5  | 12  | 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 | 12 | 1.0 |     |
| 3              | 3                                 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3        | 3 | 3 |    |     |     |
| 2              | 2                                 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 5 | 12 | 1.0 |     |
| 6              | 7                                 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 8        | 9 | 0 |    |     |     |
| Cardiomyopathy |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   | 1 | 1  | 12  | 1.0 |

ENDOCRINE SYSTEM

|                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Adrenal Cortex                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1   |     |
| Accessory Adrenal Cortical Nodule |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |
| Angiectasis                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 4.0 |     |
| Degeneration, Cystic              |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   | 1 |   | 8  | 1.3 |     |
| Hemorrhage                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4 |   | 1  | 3.0 |     |
| Metaplasia, Osseous               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |
| Necrosis                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 2.0 |     |
| Thrombus                          |   |   |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   | 2  | 2.0 |     |
| Adrenal Medulla                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2   |     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2.5 |     |
| Islets, Pancreatic                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 2   |     |
| Hyperplasia                       |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 2  | 1.5 |     |
| Parathyroid Gland                 | + | + | + | + | + | M | + | + | M | + | + | + | + | + | + | M | + | M | + | + | + | M | + | +  | 43  |     |
| Pituitary Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 18  |     |
| Pars Distalis, Hyperplasia        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   | 1 | 4 |   | 1  | 4   | 1.9 |
| Thyroid Gland                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | 1   |     |
| Inflammation, Acute               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |     |
| Polyarteritis Nodosa              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |     |
| Bilateral, C-cell, Hyperplasia    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 2.3 |     |
| C-cell, Hyperplasia               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8  | 1.8 |     |

\* .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ .. Tissue examined microscopically  
X .. Lesion present  
I .. Insufficient tissue  
M .. Missing tissue  
A .. Autolysis precludes evaluation  
BLANK .. Not examined microscopically  
1-4 .. Lesion qualified as:  
1) Minimal 3) Moderate  
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Experiment Number: 10188 - 02

Test Type: CHRONIC

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1000 ppm Female  | DAY ON TEST |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | females<br>(cont...) |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------|
|  | 0735        | 0735  | 0768  | 0773  | 0775  | 0775  | 0780  | 0784  | 0789  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  | 0792  |                      |
| ANIMAL ID  | 00351       | 00352 | 00353 | 00354 | 00355 | 00356 | 00357 | 00358 | 00359 | 00360 | 00361 | 00362 | 00363 | 00364 | 00365 | 00366 | 00367 | 00368 | 00369 | 00370 | 00371 | 00372 | 00373 | 00374 | 00375 | 00376                |
| Bile Duct, Cyst  |             |       |       |       |       |       |       |       |       | X     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Bile Duct, Dilation  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Bile Duct, Hyperplasia   | 1           | 1     |       | 2     |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 2                    |
| Hepatocyte, Cytoplasmic Alteration   |             |       |       |       |       |       |       |       |       | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Hepatocyte, Hypertrophy  |             |       |       |       |       |       |       |       |       |       |       |       |       |       | 2     |       |       |       |       |       |       |       | 2     |       |       |                      |
| Mesentery<br>Fat, Necrosis   |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Pancreas<br>Acinus, Atrophy  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                    |
| Salivary Glands  |             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                      |
| Stomach, Forestomach<br>Inflammation, Chronic Active<br>Polyarteritis Nodosa<br>Ulcer<br>Epithelium, Hyperplasia | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                    |
| Stomach, Glandular<br>Mineral  | +           | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +                    |

CARDIOVASCULAR SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart<br>Cardiomyopathy<br>Endocardium, Hyperplasia | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

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

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

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

Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1000 ppm Female | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | ANIMAL ID | females<br>(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 |           |                      |
|   | 7           | 7 | 6 | 7 | 7 | 7 | 5 | 2 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 3 | 7 | 5 | 7 | 4 | 7         |                      |
|   | 3           | 3 | 4 | 3 | 3 | 3 | 9 | 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 3 | 9 | 3         |                      |
|   | 5           | 5 | 8 | 5 | 5 | 5 | 0 | 4 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 4 | 6 | 0 | 6 | 6 | 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 |           |                      |
|   | 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 |   |           |                      |
|   | 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 |           |                      |

ENDOCRINE SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex               | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                  |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 | 1 |
| Extramedullary Hematopoiesis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mineral                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adrenal Medulla              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Islets, Pancreatic           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Parathyroid Gland            | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | + |
| Hyperplasia                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pituitary Gland              | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Angiectasis                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Pars Distalis, Hyperplasia   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Thyroid Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Inflammation, Acute          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C-cell, Hyperplasia          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

GENERAL BODY SYSTEM

|            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Peritoneum |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

\* .. 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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1-4 .. Lesion qualified as:  
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Experiment Number: 10188 - 02

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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Lab: BAT

|   |             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                      |    |
|---|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------------|----|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1000 ppm Female | DAY ON TEST | 07 | 07 | 06 | 07 | 07 | 07 | 05 | 02 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 07 | 03 | 07 | 05 | 07 | 04 | 07 | females<br>(cont...) |    |
|   | ANIMAL ID   | 03 | 03 | 04 | 03 | 03 | 03 | 09 | 08 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 03 | 04 | 03 | 00 | 03 | 09 |                      | 03 |
|   |             | 5  | 5  | 8  | 5  | 5  | 5  | 0  | 4  | 2  | 2  | 2  | 2  | 7  | 7  | 7  | 7  | 5  | 5  | 4  | 6  | 0  | 6  | 6  |                      | 2  |

Inflammation, Chronic

3

GENITAL SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bilateral, Atrophy               |   |   | 3 |   |   |   | 3 | 3 |   | 3 | 3 | 2 |   |   | 3 | 3 | 2 | 2 | 2 | 3 |   | 2 |   |   |
| Bursa, Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Follicle, Cyst                   |   |   |   |   |   |   | X |   |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   | X |
| Paraovarian Tissue, Cyst         |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Cyst, Squamous                   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Dilation                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Acute              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Inflammation, Chronic Active     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Perforation                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cervix, Hyperplasia, Squamous    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Hyperplasia, Cystic |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endometrium, Squamous Metaplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Vagina                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

HEMATOPOIETIC SYSTEM

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hypercellularity | 3 | 3 | 4 | 1 | 1 |   | 4 | 4 | 3 | 3 | 1 |   | 1 | 2 | 4 | 3 | 2 | 3 | 4 | 4 | 2 | 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:  
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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

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Lab: BAT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>1000 ppm Female | DAY ON TEST | 0533 | 0640 | 0581 | 0761 | 0777 | 0777 | 0777 | 0777 | 0777 | 0777 | 0575 | 0777 | 0777 | 0777 | 0777 | 0777 | 0575 | 0554 | 0773 | 0773 | 0773 | 0773 | 0773 | 0773 | * TOTALS |
|   | ANIMAL ID   | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 | 0037 |          |
|   |             | 6789 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 |          |

ALIMENTARY SYSTEM

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |        |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--------|
| Esophagus                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Intestine Large, Cecum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | 49 |        |
| Inflammation, Chronic Active |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |
| Polyarteritis Nodosa         |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Ulcer                        |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 3.0  |
| Intestine Large, Colon       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Intestine Large, Rectum      | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Parasite Metazoan            |   |   |   |   |   |   | X |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 8      |
| Polyarteritis Nodosa         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1 1.0  |
| Intestine Small, Duodenum    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Intestine Small, Ileum       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | 49 |        |
| Intestine Small, Jejunum     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Liver                        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |        |
| Basophilic Focus             |   |   |   |   |   |   |   |   |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   | X |   | 3  |        |
| Clear Cell Focus             |   |   |   | X |   |   | X | X |   | X |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |    | 15     |
| Eosinophilic Focus           |   |   |   |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 4      |
| Extramedullary Hematopoiesis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 1.0  |
| Hepatodiaphragmatic Nodule   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3      |
| Mixed Cell Focus             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1      |
| Necrosis                     |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 3 2.3  |
| Pigment                      |   |   |   | 1 |   |   | 1 | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 14 1.1 |

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|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------|
|   | 0<br>5<br>3<br>3      | 0<br>6<br>4<br>0      | 0<br>5<br>8<br>1      | 0<br>7<br>0<br>1      | 0<br>6<br>5<br>1      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>7      | 0<br>7<br>3<br>7      | 0<br>5<br>0<br>1      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>6      | 0<br>5<br>0<br>1      | 0<br>5<br>4<br>6      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>2      | 0<br>7<br>3<br>6      | 0<br>7<br>3<br>6      |                       |          |
| ANIMAL ID   | 0<br>0<br>3<br>7<br>6 | 0<br>0<br>3<br>7<br>7 | 0<br>0<br>3<br>7<br>8 | 0<br>0<br>3<br>7<br>8 | 0<br>0<br>3<br>8<br>0 | 0<br>0<br>3<br>8<br>1 | 0<br>0<br>3<br>8<br>2 | 0<br>0<br>3<br>8<br>3 | 0<br>0<br>3<br>8<br>4 | 0<br>0<br>3<br>8<br>5 | 0<br>0<br>3<br>8<br>6 | 0<br>0<br>3<br>8<br>7 | 0<br>0<br>3<br>8<br>8 | 0<br>0<br>3<br>8<br>9 | 0<br>0<br>3<br>9<br>0 | 0<br>0<br>3<br>9<br>1 | 0<br>0<br>3<br>9<br>2 | 0<br>0<br>3<br>9<br>3 | 0<br>0<br>3<br>9<br>4 | 0<br>0<br>3<br>9<br>5 | 0<br>0<br>3<br>9<br>6 | 0<br>0<br>3<br>9<br>7 | 0<br>0<br>3<br>9<br>8 | 0<br>0<br>3<br>9<br>9 |          |

|                                    |  |  |   |   |  |   |   |  |  |  |   |   |  |  |   |  |   |  |   |   |   |  |  |    |     |     |
|------------------------------------|--|--|---|---|--|---|---|--|--|--|---|---|--|--|---|--|---|--|---|---|---|--|--|----|-----|-----|
| Bile Duct, Cyst                    |  |  |   |   |  |   |   |  |  |  |   |   |  |  |   |  |   |  |   |   |   |  |  |    | 1   |     |
| Bile Duct, Dilation                |  |  |   |   |  |   |   |  |  |  |   |   |  |  |   |  |   |  |   |   |   |  |  |    | 1   | 3.0 |
| Bile Duct, Hyperplasia             |  |  | 1 |   |  |   | 1 |  |  |  | 1 |   |  |  |   |  |   |  | 1 |   | 1 |  |  | 13 | 1.2 |     |
| Hepatocyte, Cytoplasmic Alteration |  |  |   | 2 |  | 1 |   |  |  |  |   |   |  |  | 1 |  | 1 |  |   |   | 1 |  |  | 7  | 1.1 |     |
| Hepatocyte, Hypertrophy            |  |  |   |   |  | 1 |   |  |  |  |   | 2 |  |  |   |  |   |  |   | 1 |   |  |  | 5  | 1.6 |     |

|               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |   |     |
|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|-----|
| Mesentery     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | + | 1 |     |
| Fat, Necrosis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1.0 |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Pancreas        | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Acinus, Atrophy |   | 1 |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  | 1.3 |

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |  |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Stomach, Forestomach         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Inflammation, Chronic Active | 2 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 1.5 |
| Polyarteritis Nodosa         |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Ulcer                        | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  | 1.0 |
| Epithelium, Hyperplasia      | 1 |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 3  | 1.0 |

|                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Mineral            |   |   |   | 2 |   |   |   |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |   |   | 4  | 1.3 |

CARDIOVASCULAR SYSTEM

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |  |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |  |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|

|                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|
| Heart                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |     |
| Cardiomyopathy           |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   |   |   | 1 |   | 8  | 1.0 |
| Endocardium, Hyperplasia |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 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





Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST                                 | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |      |    |
|---|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|------|----|
|   | 0533                              | 0640  | 0580  | 0701  | 0651  | 0771  | 0777  | 0777  | 0777  | 0777  | 0777  | 0575  | 0777  | 0777  | 0777  | 0777  | 0777  | 0575  | 0554  | 0773  |          | 0773  | 0773  | 0773  | 0773  | 0773 |    |
| 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 | 00400 |      |    |
|   | 0                                 | 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    |    |
| Lymph Node                                  |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 1    |    |
| Inguinal, Infiltration Cellular, Histiocyte |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 2    |    |
| Lumbar, Infiltration Cellular, Plasma Cell  |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 3    |    |
| Lymph Node, Mandibular                      | +                                 | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | 50   |    |
| Infiltration Cellular, Plasma Cell          |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 2    |    |
| Lymph Node, Mesenteric                      | +                                 | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | 50   |    |
| Hyperplasia, Lymphocyte                     |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       |       |       |       | 3    |    |
| Spleen                                      | +                                 | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | 50   |    |
| Extramedullary Hematopoiesis                | 2                                 | 2     | 3     | 3     | 2     | 2     | 2     | 3     | 2     | 1     | 3     | 3     | 2     | 1     | 2     | 3     | 3     | 3     |       | 1     | 2        | 2     |       | 2     | 2     | 47   |    |
| Pigment                                     | 1                                 | 2     |       | 1     | 2     | 2     | 1     |       | 2     | 2     | 1     | 2     | 2     | 2     | 1     |       |       |       | 3     | 2     | 1        | 2     | 2     | 2     |       | 41   |    |
| White Pulp, Atrophy                         |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 3     |       |          |       |       |       |       | 2    |    |
| Thymus                                      | +                                 | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +     | +        | +     | +     | +     | +     | 48   |    |
| Atrophy                                     | 2                                 | 3     |       | 2     | 3     | 2     |       | 2     | 2     | 1     | 2     | 3     | 2     | 2     | 2     | 3     | 3     | 3     | 2     | 2     | 2        | 2     | 2     | 2     | 1     | 4    | 45 |
| Cyst  |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |          |       | X     |       |       | 1    |    |

**INTEGUMENTARY SYSTEM**

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland                | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Galactocele                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | X  |
| Hyperplasia                  |   |   | 2 |   |   | 2 | 3 | 2 | 1 |   | 1 |   |   |   |   |   | 3 |   |   |   |   |   |   | 1 | 1 | 15 |
| Skin                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Inflammation, Chronic Active |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4  |
| Ulcer                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 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















Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                   |   |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|---|
| <b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b><br><b>3000 ppm Female</b> | DAY ON TEST | 0732 | 0629 | 0736 | 0776 | 0575 | 0776 | 0777 | 0777 | 0777 | 0112 | 0745 | 0772 | 0675 | 0772 | 0776 | 0776 | 0339 | 0592 | 0735 | 0771 | 0775 | 0675 | females (cont...) |   |
|  | ANIMAL ID   | 0040 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 |                   |   |
|  |             | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    |                   | 3 |

Skin +

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +  
Degeneration  
Necrosis 4 1

RESPIRATORY SYSTEM

Lung + M +  
Infiltration Cellular, Histiocyte  
Inflammation, Granulomatous 3 4 3 2 4 3 2 1 2 1 2 3 3 2 3 2 2 2 3 3 2 3 3 1

Nose +  
Inflammation, Chronic Active  
Olfactory Epithelium, Accumulation, Hyaline  
Droplet 3 1 3 3 3 1 3 2 4 4 1 2 4 4 3 4 2 4 2 4 2 1 2 4  
Respiratory Epithelium, Accumulation, Hyaline  
Droplet 1  
Respiratory Epithelium, Squamous Metaplasia

Trachea + M +

SPECIAL SENSES SYSTEM

Eye +

\* .. 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







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| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>3000 ppm Female | DAY ON TEST |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | * TOTALS |   |     |       |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|-----|-------|
|   | ANIMAL ID   |   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 | 0   |       |
| Blood Vessel  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 50  |       |
| Aneurysm  | 7           | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7 | 7        | 7 | 2   | 2 2.0 |
| Thrombus  | 3           | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 1 | 7 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 3 | 3        | 3 | 1   | 3.0   |
| Heart   | 5           | 5 | 5 | 7 | 7 | 1 | 7 | 7 | 7 | 0 | 7 | 9 | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 7 | 7 | 7 | 7        | 7 | 49  |       |
| Cardiomyopathy  | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 13  | 1.1   |
| Atrium, Thrombus  | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 1   | 3.0   |
| <b>ENDOCRINE SYSTEM</b>                                 |             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   |     |       |
| Adrenal Cortex  | 2           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 50  |       |
| Angiectasis   | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 2   | 2.0   |
| Degeneration, Cystic                                    | 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   | 1.3   |
| Hyperplasia   | 2           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 2   | 2.0   |
| Thrombus  | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7        | 8 | 1   | 1.0   |
| Adrenal Medulla   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 50  |       |
| Islets, Pancreatic                                      | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 50  |       |
| Hyperplasia   | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 1   | 1.3   |
| Parathyroid Gland                                       | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 37  |       |
| Hyperplasia   | 4           | 4 | 4 | 4 | 4 | M | M | + | + | + | M | + | M | + | + | M | + | + | + | + | M | + | +        | 2 | 2.0 |       |
| Pituitary Gland   | 0           | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0        | 0 | 49  |       |
| Cyst  | 4           | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 1   | 1     |
| Pars Distalis, Hyperplasia                              | 2           | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 1   | 1.7   |
| Thyroid Gland   | 6           | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7        | 8 | 47  |       |

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|---------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|-----|-----|
|                     | 0                                 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |          | 0 |   |   |     |     |
| 7                   | 7                                 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 6 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 4 | 7        | 7 | 7 | 6 | 1.8 |     |
| 3                   | 3                                 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 1 | 7 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 5 | 3        | 3 | 3 |   |     |     |
| 5                   | 5                                 | 5 | 5 | 7 | 7 | 1 | 7 | 7 | 7 | 0 | 7 | 9 | 2 | 7 | 2 | 2 | 2 | 2 | 2 | 7 | 7        | 2 | 2 | 6 | 1.8 |     |
| 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 | 6 | 1.8 |     |
| 4                   | 4                                 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 4 |   |     |     |
| 2                   | 2                                 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4        | 4 | 5 | 6 | 1.8 |     |
| 6                   | 7                                 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6        | 8 | 9 |   |     |     |
| C-cell, Hyperplasia |                                   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |          |   | 1 | 3 | 6   | 1.8 |

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|-----|
| Clitoral Gland                   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |     |
| Ovary                            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |     |
| Bilateral, Atrophy               | 3 |   |   | 2 |   |   | 2 |   |   | 2 |   |   | 2 | 2 | 2 | 2 | 3 | 3 | 2 |   | 3 | 2 |   | 4 | 2  | 3  | 28  | 2.4 |
| Bilateral, Polyarteritis Nodosa  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 1.0 |     |
| Bilateral, Follicle, Cyst        |   |   |   |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |    | 3  |     |     |
| Bursa, Cyst                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  |     |     |
| Corpus Luteum, Cyst              |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |     |     |
| Follicle, Cyst                   | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 8  |     |     |
| Germinal Epithelium, Cyst        |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |     |     |
| Oviduct                          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  |     |     |
| Inflammation, Chronic            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |     |
| Uterus                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |    |     |     |
| Dilation                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |     |
| Hemorrhage                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 3.0 |     |
| Inflammation, Acute              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 2  | 2.5 |     |
| Polyarteritis Nodosa             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 2.0 |     |
| Endometrium, Hyperplasia, Cystic | 2 |   |   | 1 |   |   | 2 |   |   | 1 |   |   | 2 | 1 | 1 | 2 | 1 | 1 | 1 |   | 1 | 1 |   | 1 | 1  | 23 | 1.3 |     |
| Endometrium, Squamous Metaplasia | 2 |   |   | 1 |   |   | 1 |   |   |   |   |   | 1 |   | 1 | 1 |   |   |   |   | 2 |   |   | 2 | 1  | 17 | 1.3 |     |

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked







Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>10000 ppm Female | DAY ON TEST | 0735 | 0732 | 0735 | 0731 | 0733 | 0738 | 0738 | 0655 | 0608 | 0705 | 0707 | 0707 | 0707 | 0707 | 0606 | 0505 | 0703 | 0700 | 0703 | 0509 | 0703 | 0703 | 0602 | 0606 | 0606 | 0707 | females<br>(cont...) |
|  | ANIMAL ID   | 0045 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 |                      |
|  |             | 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    |      |                      |

ALIMENTARY SYSTEM

|  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus                                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum<br>Parasite Metazoan | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum                    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum<br>Parasite Metazoan  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum                     | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Liver  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Angiectasis                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Basophilic Focus                             | X |   |   |   | X |   |   |   |   |   | X |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |
| Clear Cell Focus                             | X |   |   |   |   |   |   |   |   |   | X | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Degeneration, Cystic                         |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Eosinophilic Focus                           |   |   |   |   |   |   |   | X |   |   | X | X |   | X |   |   |   | X | X | X |   |   |   |   |   |   |   |
| Extramedullary Hematopoiesis                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 1 |   |   |   |
| Hyperplasia, Nodular                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Necrosis                                     |   | 2 |   |   |   | 2 |   | 3 |   |   |   |   |   |   | 2 | 3 |   |   |   |   |   |   | 2 |   |   |   |   |
| Pigment                                      | 3 | 3 | 3 |   | 3 | 2 | 2 |   | 3 | 3 | 3 | 2 | 1 | 3 |   | 3 |   | 2 | 3 | 3 | 2 | 3 | 3 | 2 |   |   | 2 |
| Bile Duct, Hyperplasia                       |   |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| Hepatocyte, Cytoplasmic Alteration           | 4 | 2 | 4 |   | 4 | 3 | 2 | 2 |   | 3 | 4 | 4 | 4 | 4 | 3 |   | 4 |   | 4 | 3 | 4 | 4 | 2 | 4 | 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







Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

|   |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>HARLAN SPRAGUE DAWLEY RATS</b><br><b>FEMALE</b><br><b>10000 ppm Female</b> | DAY ON TEST | 0735 | 0723 | 0773 | 0731 | 0743 | 0708 | 0605 | 0608 | 0705 | 0705 | 0705 | 0706 | 0706 | 0664 | 0551 | 0703 | 0700 | 0737 | 0573 | 0703 | 0662 | 0661 | 0706 | 0706 |      |
|   | ANIMAL ID   | 0045 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 |
|   |             | 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...)

Atrophy 4

Spleen + + + + + M + + + + + + + + + M + + + + + + +  
 Extramedullary Hematopoiesis 1 1 2 2 3 1 1 1 2 3 2 2 1 1 2 2 3 3 2  
 Pigment 1 1 1 3 1 2 2 2 1 1 1 2 2 1 1 1 2 1 1 2 1 1 2  
 White Pulp, Atrophy 2 3 2 2 2 2 3

Thymus + + + + + M + + + + + + + + + M + + + + + + +  
 Atrophy 3 1 3 4 2 3 3 2 1 1 1 2 2 1 2 2 1 2 3 2 1  
 Ectopic Parathyroid Gland  
 Necrosis

INTEGUMENTARY SYSTEM

Mammary Gland + + + + + + + + + + + + + + + M + + + + + + +  
 Galactocoele  
 Hyperplasia 2 2 2 1  
 Skin + + + + + + M + + + + + + + + + + + + + + + +

MUSCULOSKELETAL SYSTEM

Bone +  
 Skeletal Muscle

NERVOUS SYSTEM

Brain +  
 Necrosis 2

\* .. 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

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|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>10000 ppm Female | DAY ON TEST | 0735 | 0723 | 0773 | 0731 | 0773 | 0748 | 0706 | 0760 | 0707 | 0777 | 0777 | 0777 | 0777 | 0777 | 0666 | 0655 | 0777 | 0700 | 0737 | 0755 | 0777 | 0777 | 0666 | 0666 | 0777 | females<br>(cont...) |
|  | ANIMAL ID   | 0045 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 | 0044 |                      |
|  |             | 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    |                      |

Meninges, Hyperplasia

1

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + |
| Infiltration Cellular, Histiocyte                     | 2 | 3 | 4 | 2 | 4 | 2 |   | 4 |   | 2 | 2 | 2 | 2 | 1 | 3 | 1 | 2 |   | 4 | 3 | 2 | 2 | 2 | 2 | 3 |
| Inflammation, Granulomatous                           |   |   | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |
| Thrombus  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 2 | 3 | 2 | 1 | 2 | 2 |   | 1 |   | 4 | 3 | 3 | 1 | 3 | 1 | 1 | 3 |   | 2 | 1 | 1 | 2 | 3 | 3 | 3 |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |
| Cornea, Inflammation, Acute |   |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| Lens, Cataract              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Retina, Degeneration        |   |   | 2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |
| Harderian Gland             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + |

URINARY SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + |
| Infarct                          |   |   |   | 4 |   |   |   |   |   |   | 1 |   |   |   |   |   |   |   | 1 |   |   |   | 2 |   | 1 |
| Nephropathy, Chronic Progressive | 1 | 1 | 1 | 3 | 1 | 1 |   | 1 |   | 1 | 1 | 1 | 1 | 2 | 1 |   | 1 |   | 1 | 1 | 1 | 1 | 1 | 2 | 1 |

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|--|-------------|------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|
|  | 0735        | 0735 | 0735      | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 | 0735 |                      | 0735 | 0735 |
| Epithelium, Papilla, Hyperplasia                         |             |      | 1         |      |      |      |      |      |      |      |      | 2    |      | 1    |      |      | 1    |      | 1    |      |      |      |                      | 1    |      |
| Papilla, Edema   | 1           | 1    | 2         |      | 1    | 2    |      | 2    |      | 2    | 1    | 3    | 2    | 2    | 1    | 1    | 1    |      |      | 2    | 1    | 2    | 1                    | 2    | 1    |
| Papilla, Hemorrhage                                      |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1    |      |      |                      |      | 1    |
| Pelvis, Dilation   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      | 1    |
| Renal Tubule, Accumulation, Hyaline Droplet              |             |      |           |      |      |      |      |      |      |      | 1    |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Renal Tubule, Cyst                                       | X           |      |           |      |      | X    |      |      |      | X    |      |      |      | X    |      |      |      |      | X    |      |      | X    |                      |      |      |
| Renal Tubule, Dilation                                   |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Urethra  |             |      |           |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |      |
| Urinary Bladder  | +           | +    | +         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    | M    | +    | +    | +    | +    | +                    | +    | +    |

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First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| DAY ON TEST      | HARLAN SPRAGUE DAWLEY RATS FEMALE |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | * TOTALS |       |       |       |       |
|------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|
|                  | 0737                              | 0037  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  | 0077  |          | 0077  |       |       |       |
| 10000 ppm Female | 00476                             | 00477 | 00478 | 00479 | 00480 | 00481 | 00482 | 00483 | 00484 | 00485 | 00486 | 00487 | 00488 | 00489 | 00490 | 00491 | 00492 | 00493 | 00494 | 00495 | 00496    | 00497 | 00498 | 00499 | 00500 |

**ALIMENTARY SYSTEM**

|                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus                          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 49 |
| Intestine Large, Cecum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Intestine Large, Colon             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Intestine Large, Rectum            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Parasite Metazoan                  |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 3  |
| Intestine Small, Duodenum          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Intestine Small, Ileum             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Parasite Metazoan                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Intestine Small, Jejunum           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Liver                              | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |
| Angiectasis                        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  |
| Basophilic Focus                   |   |   | X | X |   |   |   | X |   |   |   |   | X |   |   |   |   |   |   | X |   |   |   |   |   | 10 |
| Clear Cell Focus                   | X |   |   |   |   |   |   |   |   |   |   | X |   |   |   | X |   |   |   |   |   |   | X |   |   | 8  |
| Degeneration, Cystic               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Eosinophilic Focus                 |   |   |   |   |   |   |   |   |   |   | X |   |   |   |   | X | X |   |   |   |   |   |   | X |   | 12 |
| Extramedullary Hematopoiesis       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 | 4  |
| Hyperplasia, Nodular               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1  |
| Necrosis                           |   |   |   |   |   |   |   |   |   |   |   | 3 |   |   |   |   |   |   |   |   |   |   |   |   |   | 8  |
| Pigment                            | 3 |   | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |   |   | 3 | 3 | 2 |   | 3 | 1 | 3 | 2 | 3 | 4 |   | 2 | 2 | 40 |
| Bile Duct, Hyperplasia             |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8  |
| Hepatocyte, Cytoplasmic Alteration | 4 |   | 4 | 3 | 4 | 4 | 4 | 3 |   |   |   |   | 4 | 4 | 3 |   | 2 | 3 | 3 | 3 | 4 | 4 |   | 2 | 1 | 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







Experiment Number: 10188 - 02

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Di(2-ethylhexyl) Phthalate

CAS Number: 117-81-7

Date Report Requested: 06/02/2020

Time Report Requested: 13:48:37

First Dose M/F: 06/27/11 / 06/28/11

Lab: BAT

| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>10000 ppm Female | DAY ON TEST |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | * TOTALS |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|
|  | 0737        | 0037 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 |          |
| ANIMAL ID  | 0047        | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047 | 0047     |

|                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |   |   |   |   |   |   |   |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|
| Atrophy                      |   |   |   |   | 4 |   |   |   | 2 |   |   |   | 2 |   |   |   | 4 | 3.0 |   |   |   |   |   |   |   |
| Spleen                       | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +   | + | + | M | + | + |   |   |
| Extramedullary Hematopoiesis | 2 |   | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 3 |   | 2 | 2 | 1 |   | 1 | 3 | 3   | 1 | 2 |   |   | 2 | 3 |   |
| Pigment                      | 2 |   | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 1 |   | 1 | 1 | 2 |   | 2 |   | 1   | 1 | 1 | 3 |   | 1 | 1 |   |
| White Pulp, Atrophy          |   | 4 |   |   |   |   |   |   |   | 2 |   |   |   |   | 3 |   |   |     |   | 4 |   |   |   |   |   |
| Thymus                       | + | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | +   | + | + | + | M | + | + |   |
| Atrophy                      | 2 |   | 2 | 2 | 3 | 4 |   | 3 | 4 | 3 |   | 3 | 3 |   | 3 | 2 | 2 | 3   | 1 | 3 | 4 | 3 |   | 2 | 3 |
| Ectopic Parathyroid Gland    |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |     |   |   |   |   |   |   |   |
| Necrosis                     |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |   |   |     |   |   |   |   |   |   |   |

INTEGUMENTARY SYSTEM

|               |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + |
| Galactocele   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2 |   |   |   |   |
| Hyperplasia   | 1 |   |   |   | 1 |   |   | 1 |   |   |   |   | 1 |   | 2 |   |   |   |   |   |   |   | 1 |   |
| Skin          | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

MUSCULOSKELETAL SYSTEM

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone            | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Skeletal Muscle |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | + |   | + |

NERVOUS SYSTEM

|          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain    | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |   |
| Necrosis |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | M | + | + |

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

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X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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|  |             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|
| HARLAN SPRAGUE DAWLEY RATS<br>FEMALE<br>10000 ppm Female | DAY ON TEST | 0737 | 0037 | 0077 | 0077 | 0077 | 0077 | 0077 | 0077 | 0057 | 0070 | 0077 | 0077 | 0077 | 0007 | 0073 | 0066 | 0066 | 0073 | 0077 | 0066 | 0000 | 0000 | 0077 | 0077 | * TOTALS |      |
|  | ANIMAL ID   | 0046 | 0047 | 0048 | 0049 | 0050 | 0051 | 0052 | 0053 | 0054 | 0055 | 0056 | 0057 | 0058 | 0059 | 0060 | 0061 | 0062 | 0063 | 0064 | 0065 | 0066 | 0067 | 0068 | 0069 |          | 0070 |
|  |             | 7    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |          | 0    |

Meninges, Hyperplasia

1 1.0

RESPIRATORY SYSTEM

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |     |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|-----|--|
| Lung  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |    |     |  |
| Infiltration Cellular, Histiocyte                     | 1 |   | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 |   | 1 | 3 | 2 |   | 3 | 3 | 2 | 2 | 3 | 4 |   | 2 | 3  | 42 | 2.4 |  |
| Inflammation, Granulomatous                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1 |   |   | 1 | 1  | 7  | 1.0 |  |
| Thrombus  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 1.0 |  |
| Nose  | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | +  | 50 |     |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet   | 3 |   | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 2 |   | 3 | 2 | 4 |   | 2 | 3 | 3 | 2 | 2 |   |   | 2 | 1  | 41 | 2.2 |  |
| Respiratory Epithelium, Accumulation, Hyaline Droplet |   |   |   |   |   | 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    | 1  | 1.0 |  |
| Trachea   | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | +  | 49 |     |  |

SPECIAL SENSES SYSTEM

|                             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   |     |     |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|-----|-----|
| Eye                         | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |     |     |
| Cornea, Inflammation, Acute |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2  | 2 | 1.5 |     |
| Lens, Cataract              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   | 1   | 2.0 |
| Retina, Degeneration        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |   | 2   | 2.0 |
| Harderian Gland             | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |   |     |     |

URINARY SYSTEM

|                                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |     |     |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|-----|-----|
| Kidney                           | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 48 |     |     |
| Infarct                          |   |   |   | 3 |   |   | 1 | 1 |   | 1 |   |   |   |   | 1 |   |   |   |   | 1 | 1 |   |   |   |    | 12  | 1.5 |
| Nephropathy, Chronic Progressive | 2 |   | 1 | 1 | 1 | 1 |   | 1 |   |   |   | 1 | 1 | 2 |   | 1 | 1 | 1 |   | 3 | 1 |   | 1 | 2 | 37 | 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:

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