

**Experiment Number:** 20614 - 01  
**Test Type:** CHRONIC  
**Route:** DOSED FEED  
**Species/Strain:** RATS/HSD

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Perfluorooctanoic Acid  
**CAS Number:** 335-67-1

**Date Report Requested:** 07/25/2018  
**Time Report Requested:** 12:59:28  
**First Dose M/F:** 10/27/08 / 10/28/08  
**Lab:** BAT

Final 1\_16 Week SSAC Only

**NTP Study Number:** C20614  
**Lock Date:** 01/10/2012  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** 25017 SSAC  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.2.3\_002  
**PWG Approval Date:** 07/25/2018

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0/0 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	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
		1	1	2	2	2	4	4	4	5		1	1	2	2	2	4	4	4	5
		0	5	2	3	4	9	3	4	6		0	5	2	3	4	9	3	4	6
											<b>* TOTALS</b>									

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Focal	1	1	1	1	1	1	1	1			8 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
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\* .. 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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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	1	1	1	1	1	1	1	1	1	1		
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0		
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9		
<b>0/0 ppm</b>	0	0	0	0	0	0	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	2	2	2	4	4	4	4	5		
	0	5	2	3	4	9	3	4	6	1		
<b>* TOTALS</b>												

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Cardiomyopathy	1					1			1	1		<b>4 1.0</b>

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Hyperplasia			2									<b>1 2.0</b>
Hypertrophy				1		1						<b>2 1.0</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>	

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Prostate	+	+	+	+	+	+	+	+	+	+	<b>10</b>	

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	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>0/0 ppm</b>	0	0	0	0	0	0	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	2	2	2	4	4	4	4	5			
	0	5	2	3	4	9	3	4	6	1			<b>* TOTALS</b>
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Testes	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>HEMATOPOIETIC SYSTEM</b>													
Bone Marrow	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Spleen	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Thymus	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Atrophy										1			<b>1 1.0</b>
<b>INTEGUMENTARY SYSTEM</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Skin	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>MUSCULOSKELETAL SYSTEM</b>													
Bone	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>NERVOUS SYSTEM</b>													
Brain	+	+	+	+	+	+	+	+	+	+			<b>10</b>

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	ANIMAL ID	1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	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	
		1	1	2	2	2	4	4	4	5	
		0	5	2	3	4	9	3	4	6	
											<b>* TOTALS</b>

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Accumulation, Hyaline Droplet					1			1				<b>2 1.0</b>
Nephropathy, Chronic Progressive	2	2	1	2	1	1	1	1	2	2		<b>10 1.5</b>
Pelvis, Dilation	1											<b>1 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	<b>10</b>	

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9
<b>0/150 ppm</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	1	1	
	6	7	7	8	8	8	8	9	1	1
	2	3	9	0	1	2	3	1	1	2
<b>* TOTALS</b>										

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Clear Cell Focus							X				<b>1</b>
Extramedullary Hematopoiesis	1										<b>1 1.0</b>
Inflammation, Focal	1	1	1	1	1	1	1		1		<b>9 1.0</b>
Necrosis			1	1	2		1	1		1	<b>6 1.2</b>
Pigment	1	1	1	1	2	1	1		1		<b>8 1.1</b>
Hepatocyte, Cytoplasmic Alteration	2	2	2	2	3	2	2	2	3	2	<b>10 2.2</b>
Hepatocyte, Hypertrophy	2	2	2	1	3	2	2	2	3	2	<b>10 2.1</b>
Hepatocyte, Single Cell Death	1	1	1	2	1	1	1	2	1	2	<b>10 1.3</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 0/150 ppm	DAY ON TEST										ANIMAL ID				
	0	0	0	0	0	0	0	0	0	0					
	1	1	1	1	1	1	1	1	1	1	0				
	0	0	0	0	0	0	0	0	0	0	0				
	9	9	9	9	9	9	9	9	9	9	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	1	1	0				
	6	7	7	8	8	8	8	9	1	1	0				
	2	3	9	0	1	2	3	1	1	2	0				
															<b>* TOTALS</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+					<b>10</b>
Stomach, Glandular Submucosa, Inflammation, Chronic Active	+	+	+	+	+	+	+	+	+	+	1	1			<b>10</b> <b>2 1.0</b>
<b>CARDIOVASCULAR SYSTEM</b>															
Blood Vessel	+	+	+	+	+	+	+	+	+	+					<b>10</b>
Heart	+	+	+	+	+	+	+	+	+	+					<b>10</b>
<b>ENDOCRINE SYSTEM</b>															
Adrenal Cortex Hypertrophy	+	+	+	+	+	+	+	+	+	+	2				<b>10</b> <b>1 2.0</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+					<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+					<b>10</b>
Parathyroid Gland	+	+	+	+	+	M	+	+	+	+					<b>9</b>
Pituitary Gland Pars Distalis, Cyst	+	+	+	+	+	+	+	+	+	+	X				<b>10</b> <b>1</b>
Thyroid Gland Follicular Cell, Hypertrophy	+	+	+	+	+	+	+	+	+	+	1	1			<b>10</b> <b>2 1.0</b>
<b>GENERAL BODY SYSTEM</b>															

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<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>0/150 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	1	1	
		6	7	7	8	8	8	9	1	1	
		2	3	9	0	1	2	3	1	2	
<b>* TOTALS</b>											

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Preputial Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Prostate	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Testes	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+	<b>10</b>
					1			1			<b>2 1.0</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Spleen	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Thymus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**INTEGUMENTARY SYSTEM**

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

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HARLAN SPRAGUE DAWLEY RATS MALE 0/150 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	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	1	1	
		6	7	7	8	8	8	8	9	1	
		2	3	9	0	1	2	3	1	2	
											<b>* TOTALS</b>
Skin		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>MUSCULOSKELETAL SYSTEM</b>											
Bone		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>NERVOUS SYSTEM</b>											
Brain		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>RESPIRATORY SYSTEM</b>											
Lung		+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Chronic Active					1						<b>1 1.0</b>
Alveolus, Infiltration Cellular, Histiocyte								1			<b>1 1.0</b>
Nose		+	+	+	+	+	+	+	+	+	<b>10</b>
Trachea		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>SPECIAL SENSES SYSTEM</b>											
Eye		+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>URINARY SYSTEM</b>											
Kidney		+	+	+	+	+	+	+	+	+	<b>10</b>
Nephropathy, Chronic Progressive		1		1				1		1	<b>4 1.0</b>

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	1	1	1	1	1	1	1	1	1	1		
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0		
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9		
<b>0/150 ppm</b>	0	0	0	0	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		
	6	7	7	8	8	8	8	9	1	1		
	2	3	9	0	1	2	3	1	1	2		
											<b>* TOTALS</b>	
Renal Tubule, Mineral											<b>4 1.0</b>	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+		<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST		0	0	0	0	0	0	0	0	0
<b>HARLAN SPRAGUE DAWLEY RATS MALE</b>	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	<hr/>									
	<b>150/150 ppm</b>	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	2	2	3	3	4	4	5	5	6	6
	1	9	6	9	0	7	3	4	1	7
	<b>* TOTALS</b>									

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal	1		1	1	1	1	1	1	1	<b>9 1.0</b>
Necrosis	2			1						<b>2 1.5</b>
Pigment	1	1		1	2	1	1	1	2	<b>9 1.2</b>
Hepatocyte, Cytoplasmic Alteration	2	2	3	2	3	2	1	2	2	<b>10 2.1</b>
Hepatocyte, Hypertrophy	2	1	2	2	3	1	2	2	2	<b>10 1.9</b>
Hepatocyte, Single Cell Death	1	2	1	1	1	1		1	1	<b>9 1.1</b>
Pancreas	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>150/150 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0		
	ANIMAL ID	1	1	1	1	1	1	1	1	1		
		0	0	0	0	0	0	0	0	0		
		0	0	0	0	0	0	0	0	0		
		1	1	1	1	1	1	1	1	1		
		2	2	3	3	4	4	5	5	6		
		1	9	6	9	0	7	3	4	1	7	
<b>* TOTALS</b>												

Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Submucosa, Inflammation, Chronic Active					1			1			<b>2 1.0</b>

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------	---	---	---	---	---	---	---	---	---	---	-----------

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

**ENDOCRINE SYSTEM**

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	<b>10</b>
----------------	---	---	---	---	---	---	---	---	---	---	-----------

Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-----------------	---	---	---	---	---	---	---	---	---	---	-----------

Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------------	---	---	---	---	---	---	---	---	---	---	-----------

Parathyroid Gland	+	+	+	+	+	+	+	+	M	+	<b>9</b>
-------------------	---	---	---	---	---	---	---	---	---	---	----------

Pituitary Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Rathke's Cleft, Hyperplasia, Tubular	2										<b>1 2.0</b>

Thyroid Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
---------------	---	---	---	---	---	---	---	---	---	---	-----------

**GENERAL BODY SYSTEM**

NONE

**GENITAL 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: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 150/150 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	* TOTALS
	ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	9	
	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	
	2	2	3	3	4	4	5	5	6	6	6	
	1	9	6	9	0	7	3	4	1	7	7	
<b>REPRODUCTIVE SYSTEM</b>												
Epididymis	+	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	+	10
<b>HEMATOPOIETIC SYSTEM</b>												
Bone Marrow	+	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+	+	10
								1	1			2 1.0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland	+	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>												

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

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

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS MALE</b>	0	0	0	0	0	0	0	0	0	0			
<b>150/150 ppm</b>	9	9	9	9	9	9	9	9	9	9			
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	1	1	1	1	1	1	1	1	1	1			
	2	2	3	3	4	4	5	5	6	6			
	1	9	6	9	0	7	3	4	1	7			
											<b>* TOTALS</b>		
Bone	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>NERVOUS SYSTEM</b>													
Brain	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>RESPIRATORY SYSTEM</b>													
Lung	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Inflammation, Chronic Active						1							<b>1 1.0</b>
Alveolus, Infiltration Cellular, Histiocyte									1				<b>1 1.0</b>
Nose	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Trachea	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>SPECIAL SENSES SYSTEM</b>													
Eye	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>URINARY SYSTEM</b>													
Kidney	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Mineral						1							<b>1 1.0</b>
Nephropathy, Chronic Progressive		1	1		1	1	1	1	1				<b>7 1.0</b>
Pelvis, Dilation				2									<b>1 2.0</b>
Renal Tubule, Mineral									1				<b>1 1.0</b>

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

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

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>150/150 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		2	2	3	3	4	4	5	5	6	
		1	9	6	9	0	7	3	4	1	
Urinary Bladder		+	+	+	+	+	+	+	+	<b>10</b>	

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9
<b>0/300 ppm</b>	0	0	0	0	0	0	0	0	0	0
<b>ANIMAL ID</b>	0	0	0	0	0	0	0	0	0	0
	1	1	2	2	2	2	2	2	2	2
	8	9	0	0	0	1	1	2	2	2
	5	8	2	5	6	4	6	6	7	8
<b>* TOTALS</b>										

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal		1	1	1		1	1	1	1	1	<b>8 1.0</b>
Necrosis							1	1			<b>2 1.0</b>
Pigment	2	2	2	2	2	2	2	2	2	2	<b>10 2.0</b>
Bile Duct, Hyperplasia				1							<b>1 1.0</b>
Centrilobular, Hepatocyte, Hypertrophy		2	3		3	2					<b>4 2.5</b>
Hepatocyte, Cytoplasmic Alteration	2	3	3	3	3	2	2	2	3	3	<b>10 2.6</b>
Hepatocyte, Hypertrophy	2			3			2	2	3	3	<b>6 2.5</b>
Hepatocyte, Single Cell Death	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>0/300 ppm</b>	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	1	1	2	2	2	2	2	2	2	2			
	8	9	0	0	0	1	1	2	2	2			
	5	8	2	5	6	4	6	6	7	8			
											<b>* TOTALS</b>		
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Stomach, Glandular Epithelium, Erosion	+	+	+	+	+	+	+	+	+	+		<b>10</b>	<b>1 1.0</b>
Submucosa, Inflammation, Chronic Active		1		1			1		1	1			<b>5 1.0</b>
<b>CARDIOVASCULAR SYSTEM</b>													
Blood Vessel	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Heart	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
<b>ENDOCRINE SYSTEM</b>													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Vacuolization Cytoplasmic			1										<b>1 1.0</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Atrophy				2									<b>1 2.0</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Cyst								X					<b>1</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Follicular Cell, Hypertrophy	1	1	1		1		1	1					<b>6 1.0</b>

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

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

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>0/300 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		1	1	2	2	2	2	2	2	2	
		8	9	0	0	0	1	1	2	2	
		5	8	2	5	6	4	6	6	7	

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Epididymis	+	+	+	+	+	+	+	+	+	<b>10</b>
Preputial Gland	+	+	+	+	+	+	+	+	+	<b>10</b>
Prostate	+	+	+	+	+	+	+	+	+	<b>10</b>
Seminal Vesicle	+	+	+	+	+	+	+	+	+	<b>10</b>
Testes	+	+	+	+	+	+	+	+	+	<b>10</b>

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	<b>10</b>	
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	<b>10</b>	<b>1 2.0</b>
Lymph Node, Mesenteric Atrophy	+	+	+	+	+	+	+	+	+	<b>10</b>	<b>1 3.0</b>
Spleen Lymphoid Follicle, Atrophy	+	+	+	+	+	+	+	+	+	<b>10</b>	<b>3 1.3</b>
Thymus	+	+	+	+	+	+	+	+	+	<b>10</b>	

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+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS MALE 0/300 ppm	ANIMAL ID	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1			0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0		
	9	9	9	9	9	9	9	9	9	9			8	9	0	0	1	1	2	2	2	
													5	8	2	5	6	4	6	6	7	8
											<b>* TOTALS</b>											

Atrophy	1	1	1	1	1	1	1	1	1	1	3	1.0
---------	---	---	---	---	---	---	---	---	---	---	---	-----

**INTEGUMENTARY SYSTEM**

Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
---------------	---	---	---	---	---	---	---	---	---	---	----

Skin	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

**MUSCULOSKELETAL SYSTEM**

Bone	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

**NERVOUS SYSTEM**

Brain	+	+	+	+	+	+	+	+	+	+	10
-------	---	---	---	---	---	---	---	---	---	---	----

**RESPIRATORY SYSTEM**

Lung	+	+	+	+	+	+	+	+	+	+	10	
Inflammation, Chronic Active			1									1 1.0

Nose	+	+	+	+	+	+	+	+	+	+	10
------	---	---	---	---	---	---	---	---	---	---	----

Trachea	+	+	+	+	+	+	+	+	+	+	10
---------	---	---	---	---	---	---	---	---	---	---	----

**SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	10
-----	---	---	---	---	---	---	---	---	---	---	----

Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
-----------------	---	---	---	---	---	---	---	---	---	---	----

\* .. 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: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>MALE</b> <b>0/300 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1
		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9
	ANIMAL ID	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0
		1	1	2	2	2	2	2	2	2
		8	9	0	0	0	1	1	2	2
		5	8	2	5	6	4	6	6	7

**\* TOTALS**

**URINARY SYSTEM**

Kidney	+	+	+	+	+	+	+	+	+	<b>10</b>	
Fibrosis, Focal						1					<b>1 1.0</b>
Nephropathy, Chronic Progressive		1		1				1	1		<b>4 1.0</b>
Renal Tubule, Mineral				1		1		1	1		<b>5 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	<b>10</b>	

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS MALE 300/300 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9		2	2	2	2	2	2	2	2	2	
		4	5	6	6	7	7	7	8	8		5	1	5	7	8	7	8	9	0	2
											<b>* TOTALS</b>										

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Clear Cell Focus		X								X	<b>2</b>
Fibrosis, Focal							1				<b>1 1.0</b>
Inflammation, Focal	1	2	2	2	1	1	1	1			<b>8 1.4</b>
Necrosis		1			4		1	1			<b>4 1.8</b>
Pigment	2	1	2	2	3	2	2	2	2	1	<b>10 1.9</b>
Bile Duct, Hyperplasia		1					1				<b>2 1.0</b>
Hepatocyte, Cytoplasmic Alteration	2	1	2	3	3	3	4	4	3	3	<b>10 2.8</b>
Hepatocyte, Hypertrophy	2	1	1	1	1	1	2	2	2	3	<b>10 1.6</b>
Hepatocyte, Single Cell Death	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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+ .. Tissue examined microscopically

X .. Lesion present

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1-4 .. Lesion qualified as:

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1		0	0
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>300/300 ppm</b>	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			
	4	5	6	6	6	7	7	7	8	8			
	5	1	5	7	8	7	8	9	0	2			
											<b>* TOTALS</b>		
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Epithelium, Hyperplasia									2	4			<b>2 3.0</b>
Submucosa, Inflammation, Chronic Active					1				2	2			<b>3 1.7</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Submucosa, Inflammation, Chronic Active		1					1						<b>2 1.0</b>
<b>CARDIOVASCULAR SYSTEM</b>													
Blood Vessel	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Heart	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
<b>ENDOCRINE SYSTEM</b>													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Parathyroid Gland	+	M	+	+	+	+	+	M	+	+		<b>8</b>	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Follicular Cell, Hypertrophy		1		1									<b>2 1.0</b>
<b>GENERAL BODY SYSTEM</b>													

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

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

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	HARLAN SPRAGUE DAWLEY RATS MALE 300/300 ppm	ANIMAL ID	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1			0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0			2	2	2	2	2	2	2	2	2	
	9	9	9	9	9	9	9	9	9	9			4	5	6	6	7	7	7	8	8	
													5	1	5	7	8	7	8	9	0	2
											<b>* TOTALS</b>											

NONE

GENITAL SYSTEM

Epididymis	+	+	+	+	+	+	+	+	+	+	10	
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10	
Prostate Hyperplasia	+	+	+	+	+	+	+	+	+	+	10	1 1.0
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10	
Testes	+	+	+	+	+	+	+	+	+	+	10	

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+	10	1 2.0
Lymph Node, Mesenteric Atrophy	+	+	+	+	+	+	+	+	+	+	10	2 1.5
Spleen Extramedullary Hematopoiesis	+	+	+	+	+	+	+	+	+	+	10	2 1.0
Lymphoid Follicle, Atrophy												1 1.0
Thymus	+	+	+	+	+	+	+	+	+	+	10	

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+ .. Tissue examined microscopically

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID	
	1	1	1	1	1	1	1	1	1	1		
<b>HARLAN SPRAGUE DAWLEY RATS MALE</b>	0	0	0	0	0	0	0	0	0	0		
<b>300/300 ppm</b>	9	9	9	9	9	9	9	9	9	9		
	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		
	4	5	6	6	7	7	7	8	8	8		
	5	1	5	7	8	7	8	9	0	2		
<b>* TOTALS</b>												
Atrophy	1					2						<b>2 1.5</b>

**INTEGUMENTARY SYSTEM**

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

**MUSCULOSKELETAL SYSTEM**

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

**NERVOUS SYSTEM**

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

**RESPIRATORY SYSTEM**

Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Trachea	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**SPECIAL SENSES SYSTEM**

Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**URINARY SYSTEM**

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+ .. Tissue examined microscopically  
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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>MALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>300/300 ppm</b>	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			
	4	5	6	6	7	7	7	8	8	8			
	5	1	5	7	8	7	8	9	0	2			
											<b>* TOTALS</b>		
Kidney	+	+	+	+	+	+	+	+	+	+		<b>10</b>	
Nephropathy, Chronic Progressive	1		1				1	1		1			<b>5 1.0</b>
Renal Tubule, Dilation							1						<b>1 1.0</b>
Renal Tubule, Mineral	1	1		1				1	1	1			<b>6 1.0</b>
Urinary Bladder	+	+	+	+	+	+	+	+	+	+		<b>10</b>	

\*\*\* END OF MALE DATA \*\*\*

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

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X .. Lesion present

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Route: DOSED FEED

Species/Strain: RATS/HSD

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Perfluorooctanoic Acid

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First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0/0 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9		3	3	3	3	3	3	3	3	3
		2	5	8	2	9	2	4	9	6		0	0	0	1	1	3	3	4	4
											<b>* TOTALS</b>									

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal	1	1	1		1		1		1		<b>6 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------	---	---	---	---	---	---	---	---	---	---	-----------

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

+ .. Tissue examined microscopically

X .. Lesion present

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1-4 .. Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>0/0 ppm</b>	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			
	0	0	0	1	1	3	3	3	4	4			
	2	5	8	2	9	2	4	9	1	6			
												<b>* TOTALS</b>	
Inflammation, Chronic												1	<b>1 1.0</b>
Heart	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>ENDOCRINE SYSTEM</b>													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>GENERAL BODY SYSTEM</b>													
NONE													
<b>GENITAL SYSTEM</b>													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Ovary	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Cyst		X					X		X	X			<b>4</b>
Uterus	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Endometrium, Hyperplasia, Cystic												1	<b>1 1.0</b>

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+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b>	0	0	0	0	0	0	0	0	0	0
<b>0/0 ppm</b>	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	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
	0	0	0	1	1	3	3	3	4	4
	2	5	8	2	9	2	4	9	1	6
<b>* TOTALS</b>										

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Spleen	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Extramedullary Hematopoiesis					1				1		<b>2 1.0</b>
Pigment	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Thymus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**INTEGUMENTARY SYSTEM**

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

**MUSCULOSKELETAL SYSTEM**

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

**NERVOUS SYSTEM**

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

**RESPIRATORY SYSTEM**

Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>
------	---	---	---	---	---	---	---	---	---	---	-----------

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>0/0 ppm</b>	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			
	0	0	0	1	1	3	3	3	4	4			
	2	5	8	2	9	2	4	9	1	6			
											<b>* TOTALS</b>		
Alveolus, Infiltration Cellular, Histiocyte	1										<b>1</b>	<b>1.0</b>	
Nose	+ + + + + + + + + +										<b>10</b>		
Trachea	+ + + + + + + + + +										<b>10</b>		
<b>SPECIAL SENSES SYSTEM</b>													
Eye	+ + + + + + + + + +										<b>10</b>		
Harderian Gland	+ + + + + + + + + +										<b>10</b>		
<b>URINARY SYSTEM</b>													
Kidney	+ + + + + + + + + +										<b>10</b>		
Mineral	1										<b>1</b>	<b>1.0</b>	
Nephropathy, Chronic Progressive	1 1 1										<b>5</b>	<b>1.0</b>	
Renal Tubule, Mineral	1 1										<b>2</b>	<b>1.0</b>	
Urinary Bladder	+ + + + + + + + + +										<b>10</b>		

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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BLANK .. Not examined microscopically

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2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9
<b>0/300 ppm</b>										
ANIMAL ID	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	4	4	4
	6	6	6	6	7	8	8	0	0	0
	1	5	6	7	1	2	5	5	6	9
<b>* TOTALS</b>										

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal	1			1	1		1	1		1	<b>6 1.0</b>
Bile Duct, Hyperplasia							1				<b>1 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Submucosa, Inflammation, Chronic Active					1						<b>1 1.0</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**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: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	ANIMAL ID		
	1	1	1	1	1	1	1	1	1	1			
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0			
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9			
<b>0/300 ppm</b>	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	4	4	4			
	6	6	6	6	7	8	8	0	0	0			
	1	5	6	7	1	2	5	5	6	9			
												<b>* TOTALS</b>	
Blood Vessel	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Heart	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>ENDOCRINE SYSTEM</b>													
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Pituitary Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Thyroid Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
<b>GENERAL BODY SYSTEM</b>													
NONE													
<b>GENITAL SYSTEM</b>													
Clitoral Gland	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Ovary	+	+	+	+	+	+	+	+	+	+			<b>10</b>
Cyst				X									<b>1</b>
Uterus	+	+	+	+	+	+	+	+	+	+			<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b>	0	0	0	0	0	0	0	0	0	0
<b>0/300 ppm</b>	9	9	9	9	9	9	9	9	9	9
ANIMAL ID	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	4	4	4
	6	6	6	6	7	8	8	0	0	0
	1	5	6	7	1	2	5	5	6	9
<b>* TOTALS</b>										

**HEMATOPOIETIC SYSTEM**

Bone Marrow	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Lymph Node, Mandibular	+	+	+	+	+	+	+	+	+	+	<b>10</b>	
Lymph Node, Mesenteric Atrophy, Lymphocyte	+	+	+	+	+	+	+	+	+	+	<b>10</b>	<b>1 1.0</b>
Spleen Pigment	+	+	+	+	+	+	+	+	+	+	<b>10</b>	<b>7 1.0</b>
Thymus	+	+	+	+	+	+	+	+	+	+	<b>10</b>	

**INTEGUMENTARY SYSTEM**

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

**MUSCULOSKELETAL SYSTEM**

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

**NERVOUS SYSTEM**

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

**RESPIRATORY SYSTEM**

\* .. 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: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

		0	0	0	0	0	0	0	0	0	
DAY ON TEST		1	1	1	1	1	1	1	1	1	
HARLAN SPRAGUE DAWLEY RATS		0	0	0	0	0	0	0	0	0	
FEMALE		9	9	9	9	9	9	9	9	9	
0/300 ppm		0	0	0	0	0	0	0	0	0	
ANIMAL ID		0	0	0	0	0	0	0	0	0	
		3	3	3	3	3	3	4	4	4	
		6	6	6	6	7	8	8	0	0	
		1	5	6	7	1	2	5	5	6	
<b>* TOTALS</b>											
Lung		+	+	+	+	+	+	+	+	+	<b>10</b>
Nose		+	+	+	+	+	+	+	+	+	<b>10</b>
Trachea		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>SPECIAL SENSES SYSTEM</b>											
Eye		+	+	+	+	+	+	+	+	+	<b>10</b>
Harderian Gland		+	+	+	+	+	+	+	+	+	<b>10</b>
<b>URINARY SYSTEM</b>											
Kidney		+	+	+	+	+	+	+	+	+	<b>10</b>
Nephropathy, Chronic Progressive			1	1	1		1	1	1		<b>7 1.0</b>
Renal Tubule, Mineral					1						<b>1 1.0</b>
Urinary Bladder		+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>FEMALE</b> <b>150/300 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
		0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		4	4	4	4	4	4	4	4	4	
		2	2	3	3	4	4	4	5	5	
		8	9	5	6	2	4	6	1	6	
<b>* TOTALS</b>											

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal	1	1	1	1	1	1	1	1	1	1	<b>10 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**CARDIOVASCULAR SYSTEM**

Blood Vessel	+	+	+	+	+	+	+	+	+	+	<b>10</b>
--------------	---	---	---	---	---	---	---	---	---	---	-----------

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 150/300 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9		2	2	3	3	4	4	4	5	5
		8	9	5	6	2	4	4	6	1		8	9	6	8	4	6	1	8	8
											<b>* TOTALS</b>									

Heart	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-------	---	---	---	---	---	---	---	---	---	---	-----------

**ENDOCRINE SYSTEM**

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

**GENERAL BODY SYSTEM**

NONE

**GENITAL SYSTEM**

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Ovary	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Cyst	X		X				X				<b>3</b>
Uterus	+	+	+	+	+	+	+	+	+	+	<b>10</b>

**HEMATOPOIETIC 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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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 150/300 ppm	DAY ON TEST										* TOTALS	
	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	4	4	4	4	4	4	4	4	4	4		
	2	2	3	3	4	4	4	5	5	6		
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mandibular Atrophy, Lymphocyte	+	+	+	+	+	+	+	+	+	+	10	1 1.0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10	
Spleen Pigment	+	+	+	+	+	+	+	+	+	+	10	10 1.0
Thymus	+	+	+	+	+	+	+	+	+	+	10	
<b>INTEGUMENTARY SYSTEM</b>												
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10	
Skin	+	+	+	+	+	+	+	+	+	+	10	
<b>MUSCULOSKELETAL SYSTEM</b>												
Bone	+	+	+	+	+	+	+	+	+	+	10	
<b>NERVOUS SYSTEM</b>												
Brain	+	+	+	+	+	+	+	+	+	+	10	
<b>RESPIRATORY SYSTEM</b>												
Lung	+	+	+	+	+	+	+	+	+	+	10	

\* .. 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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Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0	0	
150/300 ppm	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	4	4	4	4	4	4	4	4	4	4	
	2	2	3	3	4	4	4	5	5	6	
	8	9	5	6	2	4	6	1	6	8	
											* TOTALS
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
<b>SPECIAL SENSES SYSTEM</b>											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
<b>URINARY SYSTEM</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Accumulation, Hyaline Droplet					1						1 1.0
Nephropathy, Chronic Progressive			1		1			1	1	1	5 1.0
Renal Tubule, Mineral					1				1		2 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

\* .. 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: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9
<b>0/1000 ppm</b>										
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	5	5	5	5	5	5	5
	9	9	9	0	1	1	1	3	3	3
	1	4	9	1	1	4	9	0	1	4
<b>* TOTALS</b>										

**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Extramedullary Hematopoiesis				1							<b>1 1.0</b>
Inflammation, Focal			1	1	1	1	1	1	1	1	<b>8 1.0</b>
Necrosis						1			4		<b>2 2.5</b>
Pigment					1					1	<b>2 1.0</b>
Bile Duct, Hyperplasia			1								<b>1 1.0</b>
Hepatocyte, Cytoplasmic Alteration	2	2	1	2	1	1	1	1	1	1	<b>10 1.3</b>
Hepatocyte, Hypertrophy	2	2	2	2	1	1	1	1	1	1	<b>10 1.4</b>
Hepatocyte, Single Cell Death					1						<b>1 1.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
<b>HARLAN SPRAGUE DAWLEY RATS</b>	0	0	0	0	0	0	0	0	0	0
<b>FEMALE</b>	9	9	9	9	9	9	9	9	9	9
<b>0/1000 ppm</b>										
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	5	5	5	5	5	5	5
	9	9	9	0	1	1	1	3	3	3
	1	4	9	1	1	4	9	0	1	4
<b>* TOTALS</b>										

Stomach, Forestomach

+ + + + + + + + + +

10

Stomach, Glandular

+ + + + + + + + + +

10

**CARDIOVASCULAR SYSTEM**

Blood Vessel

+ + + + + + + + + +

10

Heart

+ + + + + + + + + +

10

**ENDOCRINE SYSTEM**

Adrenal Cortex

+ + + + + + + + + +

10

Adrenal Medulla

+ + + + + + + + + +

10

Islets, Pancreatic

+ + + + + + + + + +

10

Parathyroid Gland

+ + + + M + + + + +

9

Pituitary Gland

+ + + + + + + + + +

10

Thyroid Gland

+ + + + + + + + + +

10

Follicular Cell, Hypertrophy

1

1 1.0

**GENERAL BODY SYSTEM**

NONE

**GENITAL 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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Route: DOSED FEED

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P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0/1000 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1											
		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9		4	4	4	5	5	5	5	5	5	5
		1	4	9	1	1	4	9	3	0		9	9	9	0	1	1	1	3	3	3
		1	4	9	1	1	4	9	0	1		1	4	9	1	1	4	9	0	1	4
											<b>* TOTALS</b>										

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

HEMATOPOIETIC SYSTEM

Bone Marrow	+	+	+	+	+	+	+	+	+	+												<b>10</b>			
Lymph Node Bronchial, Hemorrhage	+		+																				<b>2</b>		<b>1 2.0</b>
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+													<b>10</b>		
Atrophy, Lymphocyte							1																	<b>1 2.0</b>	
Atrophy, Lymphoid	2																							<b>1 2.0</b>	
Lymph Node, Mesenteric	1	+	+	+	+	+	+	+	+	+													<b>9</b>		
Spleen Pigment	+	+	+	+	+	+	+	+	+	+													<b>10</b>		
	1	1	1	1	1	1	1	1	1	1															<b>10 1.0</b>
Thymus	+	+	+	+	+	+	+	+	+	+													<b>10</b>		

INTEGUMENTARY SYSTEM

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

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 0/1000 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	ANIMAL ID	0	0	0	0	0	0	0	0	0
		1	1	1	1	1	1	1	1	1		0	0	0	0	0	0	0	0	0
		9	9	9	9	9	9	9	9	9		4	4	4	5	5	5	5	5	5
		1	4	9	1	1	4	9	0	1	1	1	3	3	1	0	1	3	4	
<b>* TOTALS</b>																				

MUSCULOSKELETAL SYSTEM

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

NERVOUS SYSTEM

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

RESPIRATORY SYSTEM

Lung	+	+	+	+	+	+	+	+	+	+	<b>10</b>		
Alveolus, Infiltration Cellular, Histiocyte	1											<b>1 1.0</b>	

Nose	+	+	+	+	+	+	+	+	+	+	<b>10</b>
------	---	---	---	---	---	---	---	---	---	---	-----------

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

SPECIAL SENSES SYSTEM

Eye	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-----	---	---	---	---	---	---	---	---	---	---	-----------

Harderian Gland	+	+	+	+	+	+	+	+	+	+	<b>10</b>
-----------------	---	---	---	---	---	---	---	---	---	---	-----------

URINARY SYSTEM

Kidney	+	+	+	+	+	+	+	+	+	+	<b>10</b>		
Nephropathy, Chronic Progressive	1			1	1		1		1	1		<b>6 1.0</b>	
Papilla, Urothelium, Hyperplasia	1					1		1		2		<b>4 1.3</b>	
Pelvis, Inflammation, Chronic										2		<b>1 2.0</b>	
Renal Tubule, Mineral		1	1	1	1	1			1	1		<b>7 1.0</b>	

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

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

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

<b>HARLAN SPRAGUE DAWLEY RATS</b> <b>FEMALE</b> <b>0/1000 ppm</b>	DAY ON TEST	0	0	0	0	0	0	0	0	0	<b>* TOTALS</b>
		1	1	1	1	1	1	1	1	1	
		0	0	0	0	0	0	0	0	0	
		9	9	9	9	9	9	9	9	9	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	
		4	4	4	5	5	5	5	5	5	
		9	9	9	0	1	1	1	3	3	
		1	4	9	1	1	4	9	0	1	
Urinary Bladder		+	+	+	+	+	+	+	+	<b>10</b>	

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

+ .. Tissue examined microscopically

X .. Lesion present

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Experiment Number: 20614 - 01

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Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
300/1000 ppm	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	5	5	5	5	5	5	5	5	5	6
	4	6	6	7	7	8	8	9	9	0
	1	2	5	1	7	1	3	3	5	0
<b>* TOTALS</b>										

ALIMENTARY SYSTEM

Esophagus	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Liver	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Inflammation, Focal		1			1		1	1	1		<b>6 1.0</b>
Pigment		1	1	1		1		1	1		<b>6 1.0</b>
Hepatocyte, Cytoplasmic Alteration	1	1	2	3	2	2	3	2	2	2	<b>10 2.0</b>
Hepatocyte, Hypertrophy	1	1	2	3	2	2	3	2	2	2	<b>10 2.0</b>
Pancreas	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Salivary Glands	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	<b>10</b>
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	<b>10</b>

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

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

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1-4 .. Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 300/1000 ppm	DAY ON TEST	0	0	0	0	0	0	0	0	0	
	ANIMAL ID	0	0	0	0	0	0	0	0	0	
		1	1	1	1	1	1	1	1	1	
		9	9	9	9	9	9	9	9	9	
		5	5	5	5	5	5	5	5	6	
		4	6	6	7	7	8	8	9	9	
		1	2	5	1	7	1	3	3	5	
<b>* TOTALS</b>											

CARDIOVASCULAR SYSTEM

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

ENDOCRINE SYSTEM

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Ectopic Thymus						X					1
Follicular Cell, Hypertrophy			1			1			1	2	4 1.3

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10

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

+ .. Tissue examined microscopically

X .. Lesion present

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CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
<b>HARLAN SPRAGUE DAWLEY RATS FEMALE</b>	0	0	0	0	0	0	0	0	0	0	
<b>300/1000 ppm</b>	9	9	9	9	9	9	9	9	9	9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	5	5	5	5	5	5	5	5	5	6	
	4	6	6	7	7	8	8	9	9	0	
	1	2	5	1	7	1	3	3	5	0	
	<b>* TOTALS</b>										
Cyst	X										1
Uterus	+	+	+	+	+	+	+	+	+	+	10
<b>HEMATOPOIETIC SYSTEM</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular Atrophy	+	+	+	+	+	+	+	+	+	+	10
								2			1 2.0
Lymph Node, Mesenteric Atrophy, Lymphocyte	+	+	+	+	+	+	+	+	+	+	10
			1		2				1		3 1.3
Spleen Extramedullary Hematopoiesis Pigment	+	+	+	+	+	+	+	+	+	+	10
	1										1 1.0
	1	1	1	1	1	1	1	1	1	1	10 1.0
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>INTEGUMENTARY SYSTEM</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>MUSCULOSKELETAL SYSTEM</b>											
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>NERVOUS SYSTEM</b>											

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

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1) Minimal 3) Moderate  
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Experiment Number: 20614 - 01

Test Type: CHRONIC

Route: DOSED FEED

Species/Strain: RATS/HSD

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Perfluorooctanoic Acid

CAS Number: 335-67-1

Date Report Requested: 07/25/2018

Time Report Requested: 12:59:28

First Dose M/F: 10/27/08 / 10/28/08

Lab: BAT

HARLAN SPRAGUE DAWLEY RATS FEMALE 300/1000 ppm	DAY ON TEST										* TOTALS
	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	0 1 0 9	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	5	5	5	5	5	5	5	5	5	6	
	4	6	6	7	7	8	8	9	9	0	
Brain	+	+	+	+	+	+	+	+	+	+	10
Cerebrum, Necrosis, Chronic					2						1 2.0
<b>RESPIRATORY SYSTEM</b>											
Lung	+	+	+	+	+	+	+	+	+	+	10
Nose	+	+	+	+	+	+	+	+	+	+	10
Trachea	+	+	+	+	+	+	+	+	+	+	10
<b>SPECIAL SENSES SYSTEM</b>											
Eye	+	+	+	+	+	+	+	+	+	+	10
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
<b>URINARY SYSTEM</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Nephropathy, Chronic Progressive	1		1		1			1			4 1.0
Papilla, Urothelium, Hyperplasia				1		1		1	1		4 1.0
Pelvis, Inflammation, Chronic				2							1 2.0
Renal Tubule, Mineral			1				1	1	1	2	5 1.2
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10
Inflammation				2							1 2.0

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

\* .. 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