

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

C Number: C62157
Lock Date: 05/26/1993
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date: 03/30/1995

Experiment Number: 05217-04

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CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 731

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62959

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
* Adrenal Medulla		Pheochromocytoma Benign	Multiple
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
		Thrombosis	Moderate
[Thrombosis TGLS = 11-5]			
* Kidney		Nephropathy	Mild
* Liver		Angiectasis	Marked
		Degeneration	Cystic, Moderate
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Angiectasis TGLS = 8-25,9-26]			
[Degeneration TGLS = 8-25,9-26]			
[Leukemia Mononuclear TGLS = 7-6]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-2,12-2-1]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 10-3-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

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First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 731

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62959

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 4-24]

[Pigmentation TGLS = 4-24]

* Lymph Node, Mesenteric

Leukemia Mononuclear

* Mammary Gland

Hyperplasia

Mild

* Pancreas

Atrophy

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

* Prostate

Inflammation

Suppurative, Minimal

* Skin

Subcut Tiss

Fibroma

Hyperplasia

Moderate

[Fibroma TGLS = 2-22]

[Hyperplasia TGLS = 1-21]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-23]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 5-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 732

TRT#: 1

SEX: Male

DAY ON TEST: 578

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60057

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Moderate
* Brain		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]		Pigmentation	Mild
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Fibrosis	Moderate
[Fibrosis TGLS = 4-21]		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

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Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 732

TRT#: 1

SEX: Male

DAY ON TEST: 578

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60057

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

* Stomach, Forestomach

Hyperplasia

Moderate

[Hyperplasia TGLS = 10-4-1]

* Stomach, Glandular

Leukemia Mononuclear

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 2-7]

* Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

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Test Compound: t-Butylhydroquinone

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Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 733

TRT#: 1

SEX: Male

DAY ON TEST: 841

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Moderate
* Heart		Cardiomyopathy	Mild
		Thrombosis	Marked
	[Thrombosis TGLS = 4-5]		
* Intestine Small, Duodenum		Ulcer	Mild
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Degeneration	Cystic, Mild
	Bile Duct	Hyperplasia	Mild
	Kupffer Cell	Leukemia Mononuclear	
		Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 3-6]		
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Hyperplasia	Mild
	[Hyperplasia TGLS = 6-4-1]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 2-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 734

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62158

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|--------------------------|---------------------------|--------------------------|
| * Blood Vessel | * Bone | * Epididymis | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Ileum |
| * Islets, Pancreatic | * Nose | * Parathyroid Gland | * Skin |
| * Trachea | | | |

OBSERVATIONS

- | | | | |
|---|--------------|----------------------|----------------|
| * Adrenal Cortex | | Degeneration | Fatty, Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Brain | | Leukemia Mononuclear | |
| * Heart | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 7-5,8-5] | | | |
| * Intestine Small, Duodenum | | Leukemia Mononuclear | |
| * Intestine Small, Jejunum | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 13-24] | | | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Minimal |
| | Renal Tubule | Pigmentation | Mild |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| | Kupffer Cell | Pigmentation | Moderate |
| * Lung | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 9-2,9-2-1] | | | |
| Lymph Node | Pancreatic | Leukemia Mononuclear | |
| | Renal | Leukemia Mononuclear | |
| | | Leukemia Mononuclear | |
| | Pancreatic | Pigmentation | Mild |
| [Leukemia Mononuclear TGLS = 6-7] | | | |
| [Leukemia Mononuclear TGLS = 2-22] | | | |
| [Leukemia Mononuclear TGLS = 12-25] | | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 734

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62158

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric

Leukemia Mononuclear

* Mammary Gland

Fibroadenoma

Note: FIBROADENOMA IS HEAVILY INFILTRATED WITH MONONUCLEAR CELL LEUKEMIA.

[Fibroadenoma TGLS = 1-21]

* Pancreas

Leukemia Mononuclear

* Pituitary Gland

Leukemia Mononuclear

* Preputial Gland

Leukemia Mononuclear

* Prostate

Leukemia Mononuclear

* Salivary Glands

Leukemia Mononuclear

* Seminal Vesicle

Leukemia Mononuclear

* Spleen

Fibrosis

Minimal

Leukemia Mononuclear

[Fibrosis TGLS = 5-23]

* Stomach, Forestomach

Leukemia Mononuclear

* Stomach, Glandular

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 14-4]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 4-7]

* Thymus

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 11-3]

* Thyroid Gland

Leukemia Mononuclear

* Urinary Bladder

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 735

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy Leukemia Mononuclear	Focal, Minimal
[Leukemia Mononuclear TGLS = 6-10]			
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-5]			
* Intestine Large, Colon		Parasite Metazoan	
* Kidney	Renal Tubule	Leukemia Mononuclear Necrosis Nephropathy	Moderate Minimal
[Necrosis TGLS = 7-23]			
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 8-6]			
* Lung	Mediastinal	Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
	Renal	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 11-3-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 735

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61393

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 10-25]

[Leukemia Mononuclear TGLS = 4-26]

[Pigmentation TGLS = 10-25]

[Pigmentation TGLS = 4-26]

* Lymph Node, Mandibular

Leukemia Mononuclear

* Lymph Node, Mesenteric

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 9-24]

* Pituitary Gland

Pars Distalis

Cyst

Moderate

[Cyst TGLS = 14-1]

* Prostate

Inflammation

Suppurative, Mild

[Inflammation TGLS = 3-7-2]

* Spleen

Fibrosis

Moderate

Leukemia Mononuclear

[Fibrosis TGLS = 5-22]

[Leukemia Mononuclear TGLS = 13-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 2-7]

* Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

Animal Note: TISSUE ON SLIDE 21 IS CONSIDERED NORMAL SUBCUTANEOUS FAT.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 736

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61673

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Esophagus

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-6]		
* Lung		Infiltration Cellular	Histiocyte, Moderate
		Leukemia Mononuclear	
	[Infiltration Cellular TGLS = 4-2-1]		
	[Leukemia Mononuclear TGLS = 4-2-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Minimal
* Preputial Gland		Adenoma	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 2-6]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 736

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61673

ORGAN AND ACCOUNTABLE SITE STATUS

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 737

TRT#: 1

SEX: Male

DAY ON TEST: 753

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Pancreas	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

INSUFFICIENT TISSUE

* Pituitary Gland

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-10]			
* Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Moderate
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
		Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 4-7-3]			
[Leukemia Mononuclear TGLS = 1-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 737	TRT#: 1	SEX: Male	DAY ON TEST: 753
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61394

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 8-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
* Preputial Gland		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

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Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 738

TRT#: 1

SEX: Male

DAY ON TEST: 841

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lung	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
		Pheochromocytoma Benign	Multiple
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Cecum		Edema	Moderate
* Intestine Small, Duodenum		Ulcer	Moderate
* Islets, Pancreatic		Adenoma	
		Hyperplasia	Moderate
* Kidney		Leukemia Mononuclear	
[Nephropathy TGLS = 6-5]		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 738	TRT#: 1	SEX: Male	DAY ON TEST: 841
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-62373

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland [Dilatation TGLS = 1-8]		Dilatation	Moderate
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland [Adenoma TGLS = 10-1]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen [Leukemia Mononuclear TGLS = 4-6]		Leukemia Mononuclear Necrosis	Mild
* Testes [Adenoma TGLS = 3-7]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland [Adenoma TGLS = 8-3]	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 739

TRT#: 1

SEX: Male

DAY ON TEST: 913

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63020

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Mild
		Nephropathy	Mild
* Liver		Angiectasis	Mild
	Bile Duct	Hyperplasia	Mild
* Lymph Node, Mandibular		Ectasia	Moderate
		Hyperplasia	Lymphoid, Moderate
* Nose	Mucosa	Hyperplasia	Moderate
		Inflammation	Suppurative, Mild
	Mucosa	Metaplasia	Squamous, Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Moderate
* Preputial Gland		Cyst	Moderate
			[Cyst TGLS = 1-21]
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Pigmentation	Hemosiderin, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
			[Adenoma TGLS = 2-7]
* Thyroid Gland	Follicle	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 740

TRT#: 1

SEX: Male

DAY ON TEST: 632

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-6]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 7-3-1]		
* Lymph Node, Mesenteric		Ectasia	Moderate
		Leukemia Mononuclear	
	[Ectasia TGLS = 5-5]		
	[Leukemia Mononuclear TGLS = 5-5]		
* Nose	Globet Cell	Hyperplasia	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLS = 8-1]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 740	TRT#: 1	SEX: Male	DAY ON TEST: 632
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 91-60154

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]		
* Testes	Bilateral, Interstit Cell	Adenoma
[Adenoma TGLS = 2-7]		
* Thyroid Gland	C Cell	Adenoma
PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear	
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 741

TRT#: 1

SEX: Male

DAY ON TEST: 670

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61132

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Pancreas
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Kidney		Leukemia Mononuclear	
	Renal Tubule	Necrosis	Marked
		Nephropathy	Minimal
[Necrosis TGLS = 3-21]			
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 4-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 741	TRT#: 1	SEX: Male	DAY ON TEST: 670
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61132

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Hyperplasia	Minimal
* Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7-3]			

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 742

TRT#: 1

SEX: Male

DAY ON TEST: 841

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Atrophy	Marked
[Atrophy TGLS = 5-1-1]			
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 3-5]			
* Liver	Hepatocyte	Vacuolization Cytoplasmic	Minimal
* Mammary Gland		Dilatation	Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 4-1-1]			
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Minimal
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLS = 1-21]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 743

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Mammary Gland

OBSERVATIONS

* Adrenal Cortex		Degeneration Hypertrophy	Fatty, Moderate Focal, Moderate
* Adrenal Medulla		Pheochromocytoma Malignant	
[Pheochromocytoma Malignant TGLS = 5-21]			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Leukemia Mononuclear Nephropathy	Mild
[Leukemia Mononuclear TGLS = 6-5]			
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 7-6,8-22]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
[Hyperplasia TGLS = 12-2-1]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 11-3-1]			
[Leukemia Mononuclear TGLS = 10-23]			
[Pigmentation TGLS = 11-3-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 743

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61133

ORGAN AND ACCOUNTABLE SITE STATUS

[Pigmentation TGLS = 10-23]

* Lymph Node, Mandibular

Leukemia Mononuclear
Pigmentation

Mild

* Lymph Node, Mesenteric

[Leukemia Mononuclear TGLS = 9-5]

Leukemia Mononuclear

* Pancreas

Atrophy

Moderate

* Pituitary Gland

Leukemia Mononuclear

* Prostate

Inflammation

Suppurative, Minimal

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 4-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 3-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Adrenal Medulla Pheochromocytoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 744

TRT#: 1

SEX: Male

DAY ON TEST: 752

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lung	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Mild
[Leukemia Mononuclear TGLS = 5-10]			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Leukemia Mononuclear Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Mild
	Kupffer Cell	Pigmentation	Mild
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 6-3-1]			
[Leukemia Mononuclear TGLS = 3-7-3]			
* Lymph Node, Mandibular		Leukemia Mononuclear Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Minimal
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 744	TRT#: 1	SEX: Male	DAY ON TEST: 752
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61395

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin [Adenoma TGLS = 1-21]	Sebaceous GI	Leukemia Mononuclear Adenoma
* Spleen [Leukemia Mononuclear TGLS = 4-6]		Leukemia Mononuclear
* Testes [Adenoma TGLS = 2-7]	Bilateral, Interstit Cell	Adenoma

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Skin Sebaceous GI Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 745

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62159

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Mild
	[Leukemia Mononuclear TGLS = 6-10]		
* Adrenal Medulla		Leukemia Mononuclear Pheochromocytoma Benign	Multiple
	[Pheochromocytoma Benign TGLS = 7-22]		
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy Leukemia Mononuclear	Moderate
* Intestine Large, Cecum		Edema Leukemia Mononuclear	Moderate
	[Leukemia Mononuclear TGLS = 13-24]		
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Leukemia Mononuclear Nephropathy Pigmentation	Moderate Mild
	Renal Tubule		
	[Leukemia Mononuclear TGLS = 8-5,9-5]		
	[Pigmentation TGLS = 8-5]		
* Liver		Degeneration Hyperplasia Leukemia Mononuclear	Cystic, Moderate Moderate
	Bile Duct		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 745

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62159

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 10-6]			
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 11-5]			
Mesentery		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-23]			
* Pancreas			
Note: PANCREAS IS EDEMATOUS (TGL 5-7); MORPHOLOGY NOT AVAILABLE ON TDMS.			
* Pituitary Gland		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Mild
Note: SLIGHT EPITHELIAL HYPERPLASIA ASSOC. WITH INFLAMMATION; NOT CODED ON TDMS.			
* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[Fibrosis TGLS = 4-21]			
[Leukemia Mononuclear TGLS = 3-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
 CONTRIBUTORY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Benign

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 746

TRT#: 1

SEX: Male

DAY ON TEST: 626

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-10]			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver		Eosinophilic Focus	Marked
	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
[Eosinophilic Focus TGLS = 11-23]		Pigmentation	Mild
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 9-3-1]			
[Leukemia Mononuclear TGLS = 4-7]			
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Distalis	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	
[Angiectasis TGLS = 10-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 746	TRT#: 1	SEX: Male	DAY ON TEST: 626
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 91-60155

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[Fibrosis TGLS = 6-21]			
[Leukemia Mononuclear TGLS = 5-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 747

TRT#: 1

SEX: Male

DAY ON TEST: 707

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	Peripheral Nerve	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea

OBSERVATIONS

* Adrenal Cortex [Leukemia Mononuclear TGLS = 8-10]		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain [Leukemia Mononuclear TGLS = 11-1-1]		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart [Leukemia Mononuclear TGLS = 10-5]		Cardiomyopathy Leukemia Mononuclear	Mild
* Islets, Pancreatic Note: ISLET CELL ADENOMA IS ON SLIDE 7-3.		Adenoma	
* Kidney		Leukemia Mononuclear Nephropathy	Minimal
* Liver [Leukemia Mononuclear TGLS = 7-23]	Bile Duct	Hyperplasia Leukemia Mononuclear Necrosis	Mild Focal, Minimal
* Lung [Leukemia Mononuclear TGLS = 14-25]		Leukemia Mononuclear	
Lymph Node	Mediastinal Pancreatic Mediastinal	Leukemia Mononuclear Leukemia Mononuclear Pigmentation	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 747

TRT#: 1

SEX: Male

DAY ON TEST: 707

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61396

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 13-7-3]			
[Leukemia Mononuclear TGLS = 12-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
Note: MANDIBULAR LYMPH NODE LEUKEMIA ALSO ON SLIDE 8.			
[Leukemia Mononuclear TGLS = 1-21]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Minimal
		Leukemia Mononuclear	
* Skin	Subcut Tiss	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-24]			
Spinal Cord		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-22]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 4-7,6-7]			
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-8]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

Animal Note: TGL 2-24 IS A FOCUS OF LEUKEMIA MONUC IN SUBCUTIS; NOT CODED ON TDMS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 748

TRT#: 1

SEX: Male

DAY ON TEST: 773

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61674

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Intestine Large, Rectum
* Islets, Pancreatic	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Degeneration Leukemia Mononuclear	Fatty, Moderate
[Leukemia Mononuclear TGLS = 9-10]			
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy Leukemia Mononuclear	Moderate
* Intestine Large, Cecum		Leukemia Mononuclear	
* Intestine Large, Colon		Leukemia Mononuclear	
* Intestine Small, Duodenum		Leukemia Mononuclear	
* Intestine Small, Ileum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney		Cyst Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 10-5]		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 11-6]	Hepatocyte	Vacuolization Cytoplasmic	Moderate
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 748

TRT#: 1

SEX: Male

DAY ON TEST: 773

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61674

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 7-7]			
[Leukemia Mononuclear TGLS = 15-3-1]			
[Leukemia Mononuclear TGLS = 4-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-5]			
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 1-8]			
* Nose	Mucosa	Hyperplasia Inflammation Leukemia Mononuclear	Moderate Marked
	Mucosa	Metaplasia Leukemia Mononuclear	Squamous, Moderate
* Pituitary Gland		Leukemia Mononuclear	
* Preputial Gland		Leukemia Mononuclear	
* Prostate		Leukemia Mononuclear	
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 6-7]			
* Thymus		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 14-3]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

Animal Note: LEUKEMIA MONUC INFILTRATE IN INTESTINAL TRACT; NOT CODED ON TDMS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 749

TRT#: 1

SEX: Male

DAY ON TEST: 778

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61675

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Mild
[Leukemia Mononuclear TGLS = 4-10]			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 5-3-1]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Ectasia	Moderate
* Mammary Gland		Dilatation	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[Fibrosis TGLS = 3-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 749

TRT#: 1

SEX: Male

DAY ON TEST: 778

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61675

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 2-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 750

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60058

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Blood Vessel	Hypertrophy	Moderate
	Inflammation	Subacute, Marked
	Thrombosis	Moderate

Note: PHAGOCYTOSED HEMOSIDERIN PIGMENT IN THE LESION ON SLIDE 21; NOT CODED ON TDMS.

[Hypertrophy TGLS = 6-21]

[Inflammation TGLS = 6-21]

[Thrombosis TGLS = 6-21]

* Bone Marrow	Leukemia Mononuclear	
* Epididymis	Atypia Cellular	Moderate
* Heart	Cardiomyopathy	Minimal
* Intestine Small, Jejunum	Leukemia Mononuclear	

Note: SUPPURATIVE INFLAMMATION ASSOCIATED WITH THE LEUKEMIA MONUC; NOT CODED.

[Leukemia Mononuclear TGLS = 7-22]

* Kidney	Leukemia Mononuclear	
* Liver	Basophilic Focus	Minimal

Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
		Pigmentation	Mild

[Leukemia Mononuclear TGLS = 9-3-1]

[Leukemia Mononuclear TGLS = 4-23]

[Pigmentation TGLS = 9-3-1]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 750

TRT#: 1

SEX: Male

DAY ON TEST: 604

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60058

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric [Leukemia Mononuclear TGLS = 5-5]		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Moderate
* Prostate		Inflammation	Suppurative, Minimal
* Spleen [Leukemia Mononuclear TGLS = 3-6]		Leukemia Mononuclear	
* Stomach, Forestomach [Hyperplasia TGLS = 11-4-1]		Hyperplasia	Mild
* Testes [Adenoma TGLS = 2-7]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Mild
* Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 751

TRT#: 1

SEX: Male

DAY ON TEST: 698

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lung	* Lymph Node, Mandibular	* Mammary Gland	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Islets, Pancreatic	* Pancreas	* Pituitary Gland	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
* Bone Marrow		Hyperplasia	Moderate
* Epididymis		Atypia Cellular	Moderate
* Kidney		Mineralization	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver		Basophilic Focus	Mild
		Hematopoietic Cell Proliferation	Mild
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Moderate
* Nose	Goblet Cell	Hyperplasia	Mild
Peritoneum		Mesothelioma Malignant	
		[Mesothelioma Malignant TGLS = 2-7,2-7-1,3-7-3,4-21,5-22]	
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Peritoneum Mesothelioma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 752

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62960

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex [Angiectasis TGLS = 4-10]		Angiectasis	Moderate
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney [Cyst TGLS = 5-22]		Cyst	Moderate
		Nephropathy	Moderate
* Liver		Angiectasis	Mild
		Eosinophilic Focus	Mild
	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
* Mammary Gland [Hyperplasia TGLS = 1-8]		Hyperplasia	Mild
* Pituitary Gland [Hyperplasia TGLS = 7-1]	Pars Distalis	Hyperplasia	Focal, Mild
* Prostate [Inflammation TGLS = 6-7-2]		Inflammation	Suppurative, Mild
* Testes [Adenoma TGLS = 3-7]	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 752

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62960

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 753

TRT#: 1

SEX: Male

DAY ON TEST: 714

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 92-61398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Brain		Hemorrhage	Marked
[Hemorrhage TGLS = 6-1,6-1-1]			
* Liver	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Angiectasis	Marked
[Angiectasis TGLS = 5-1]			
* Prostate		Inflammation	Suppurative, Moderate

PRIMARY CAUSE OF DEATH

- Brain Hemorrhage

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 754

TRT#: 1

SEX: Male

DAY ON TEST: 552

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-59831

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Complex	
[Pheochromocytoma Complex TGLS = 2-22]			
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Renal Tubule	Nephropathy	Minimal
	Bile Duct	Pigmentation	Mild
* Liver		Hyperplasia	Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Lung		Hemorrhage	Moderate
		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
[Hemorrhage TGLS = 5-2]			
[Leukemia Mononuclear TGLS = 5-2]			
Lymph Node	Renal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Mammary Gland		Hyperplasia	Mild
Peritoneum		Mesothelioma Malignant	
Note: MESOTHELIO MAL IS ON SLIDE 7-1.			
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 754

TRT#: 1

SEX: Male

DAY ON TEST: 552

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-59831

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

* Testes

Interstit Cell

Adenoma

[Adenoma TGLS = 6-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Adrenal Medulla Pheochromocytoma Complex;Peritoneum Mesothelioma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 755

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61676

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Blood Vessel | * Bone | * Brain | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|--------------------------|---------------------------------------|-----------------------------------|---------------------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | Minimal |
| | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Epididymis | | Atypia Cellular | Moderate |
| * Heart | | Cardiomyopathy | Moderate |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Minimal |
| * Liver | | Leukemia Mononuclear | |
| | Kupffer Cell | Pigmentation | Mild |
| | [Leukemia Mononuclear TGLS = 8-6] | | |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| Lymph Node | Deep Cervical | Leukemia Mononuclear | |
| | Mediastinal | Leukemia Mononuclear | |
| | Pancreatic | Leukemia Mononuclear | |
| | Mediastinal | Pigmentation | Moderate |
| | [Leukemia Mononuclear TGLS = 10-22] | | |
| | [Leukemia Mononuclear TGLS = 6-7] | | |
| | [Leukemia Mononuclear TGLS = 9-3-1] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLS = 2-8] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 755

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61676

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric [Leukemia Mononuclear TGLS = 7-5]		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Intermed	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
* Preputial Gland [Cyst TGLS = 1-8-1]		Cyst	Moderate
* Spleen [Leukemia Mononuclear TGLS = 4-6,5-21]		Leukemia Mononuclear	
* Stom Gland Note: CYST IN MUSCULARIS OF GLANDULAR STOMACH; NOT CODED ON TDMS.			
* Testes [Adenoma TGLS = 3-7]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 756

TRT#: 1

SEX: Male

DAY ON TEST: 754

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61399

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
Eye		Cataract	Moderate
	Retina	Degeneration	Moderate
[Cataract TGLS = 1-21]			
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 9-3-1]			
[Leukemia Mononuclear TGLS = 7-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-5]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 756	TRT#: 1	SEX: Male	DAY ON TEST: 754
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61399

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen [Leukemia Mononuclear TGLS = 3-6,4-22]		Leukemia Mononuclear	
* Testes [Adenoma TGLS = 2-7]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	Follicle	Cyst	Moderate
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 757

TRT#: 1

SEX: Male

DAY ON TEST: 626

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60156

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
* Lung		Congestion	Mild
		Edema	Mild
[Congestion TGLS = 3-2]			
[Edema TGLS = 3-2]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
[Hyperplasia TGLS = 1-8]			
Peritoneum		Mesothelioma Malignant	
[Mesothelioma Malignant TGLS = 4-7-1]			
* Salivary Glands		Atrophy	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

- Peritoneum Mesothelioma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 758

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63021

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Eosinophilic Focus	Mild
		Hyperplasia	Mild
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 759

TRT#: 1

SEX: Male

DAY ON TEST: 674

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61134

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	Minimal
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 5-6]			
[Pigmentation TGLS = 6-21]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Pancreatic	Pigmentation	Moderate
	Renal	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 4-7-3]			
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 7-22]			
[Pigmentation TGLS = 7-22]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 759

TRT#: 1

SEX: Male

DAY ON TEST: 674

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61134

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Ectasia	Mild
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 760

TRT#: 1

SEX: Male

DAY ON TEST: 898

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 92-63022

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Parathyroid Gland
* Pituitary Gland	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
[Pheochromocytoma Benign TGLS = 5-22]			
* Kidney		Nephropathy	Mild
[Nephropathy TGLS = 4-5]			
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Mild
[Hepatodiaphragmatic Nodule TGLS = 7-23]			
[Leukemia Mononuclear TGLS = 6-6]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Hyperplasia	Moderate
Mesentery		Leukemia Mononuclear	
	Fat	Necrosis	Marked
[Leukemia Mononuclear TGLS = 2-21]			
[Necrosis TGLS = 2-21]			
* Nose	Mucosa	Hyperplasia	Minimal
* Pancreas		Atrophy	Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Minimal
* Salivary Glands		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 760	TRT#: 1	SEX: Male	DAY ON TEST: 898
	DOSE: UNTREATDCONTROL	DISP: Natural Death	HISTO: 92-63022

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen [Leukemia Mononuclear TGLS = 3-6]		Leukemia Mononuclear
* Testes [Adenoma TGLS = 1-7]	Bilateral, Interstit Cell	Adenoma
* Thyroid Gland	C Cell	Adenoma

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Adrenal Medulla Pheochromocytoma Benign

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 761

TRT#: 1

SEX: Male

DAY ON TEST: 841

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Hypertrophy Leukemia Mononuclear	Moderate Focal, Moderate
[Leukemia Mononuclear TGLS = 4-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 6-6,7-21]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 3-7-3]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 761	TRT#: 1	SEX: Male	DAY ON TEST: 841
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-62375

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 2-6-1]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 762

TRT#: 1

SEX: Male

DAY ON TEST: 802

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Blood Vessel | * Bone | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Nose |
| * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- * Thymus

OBSERVATIONS

- | | | | |
|--------------------------------------|--------------|----------------------|----------------|
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Brain | | Atrophy | Marked |
| | | Hydrocephalus | Moderate |
| [Atrophy TGLS = 9-1,9-1-1] | | | |
| * Epididymis | | Atypia Cellular | Moderate |
| * Heart | | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Moderate |
| [Nephropathy TGLS = 5-5] | | | |
| * Liver | | Degeneration | Cystic, Marked |
| | Bile Duct | Hyperplasia | Moderate |
| | | Leukemia Mononuclear | |
| | Kupffer Cell | Pigmentation | Mild |
| [Leukemia Mononuclear TGLS = 6-6] | | | |
| * Lung | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 7-2] | | | |
| Lymph Node | Iliac | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 8-23] | | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 762

TRT#: 1

SEX: Male

DAY ON TEST: 802

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62160

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland [Dilatation TGLS = 1-8]		Dilatation	Mild
Mesentery [Accessory Spleen TGLS = 4-22]		Accessory Spleen	
* Pancreas		Atrophy	Mild
* Pituitary Gland [Adenoma TGLS = 10-1]	Pars Distalis	Adenoma	
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate	Epithelium	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[Fibrosis TGLS = 2-21]			
[Leukemia Mononuclear TGLS = 3-6]			
* Testes [Adenoma TGLS = 11-7]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 763

TRT#: 1

SEX: Male

DAY ON TEST: 593

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60059

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lung		Hemorrhage	Mild
		Leukemia Mononuclear	
		[Hemorrhage TGLS = 3-2,3-2-1]	
		[Leukemia Mononuclear TGLS = 3-2,3-2-1]	
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Mild
		Pigmentation	Moderate
* Nose		Foreign Body	
	Mucosa	Hyperplasia	Moderate
		Inflammation	Suppurative, Mild
	Mucosa	Metaplasia	Squamous, Mild
* Pancreas		Atrophy	Mild
* Spleen		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 2-6]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[Adenoma TGLS = 1-7]	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 763

TRT#: 1

SEX: Male

DAY ON TEST: 593

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60059

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 764

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61135

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-10]			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Mild
		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-6]			
Lymph Node	Mediastinal	Hemorrhage	Mild
	Renal	Hemorrhage	Moderate
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Pancreatic	Pigmentation	Moderate
	Renal	Pigmentation	Marked
[Hemorrhage TGLS = 10-21]			
[Hemorrhage TGLS = 11-3-1]			
[Leukemia Mononuclear TGLS = 11-3-1]			
[Leukemia Mononuclear TGLS = 10-21]			
[Leukemia Mononuclear TGLS = 5-7-3]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 764

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61135

ORGAN AND ACCOUNTABLE SITE STATUS

[Pigmentation TGLS = 11-3-1]			
[Pigmentation TGLS = 5-7-3]			
[Pigmentation TGLS = 10-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-5]			
* Nose	Goblet Cell Mucosa	Hyperplasia Metaplasia	Minimal Squamous, Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 765

TRT#: 1

SEX: Male

DAY ON TEST: 745

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Brain		Atrophy	Marked
[Atrophy TGLS = 4-1,4-1-1]			
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Moderate
* Liver	Kupffer Cell	Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
[Fibroadenoma TGLS = 3-21]		Fibroadenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			
* Prostate	Epithelium	Hyperplasia	Moderate
* Spleen		Pigmentation	Hemosiderin, Moderate
* Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]		Atrophy	Moderate
[Atrophy TGLS = 1-7]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 766

TRT#: 1

SEX: Male

DAY ON TEST: 892

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63023

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Blood Vessel | * Bone | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Nose |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

INSUFFICIENT TISSUE

- * Thymus

OBSERVATIONS

- | | | | |
|---------------------------------------|----------------|-----------------------|---------------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 11-10] | | | |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| | | Myelofibrosis | Mild |
| * Brain | | Necrosis | Mild |
| * Epididymis | | Atypia Cellular | Moderate |
| * Kidney | | Mineralization | Mild |
| | Renal Tubule | Necrosis | Moderate |
| | | Nephropathy | Minimal |
| [Necrosis TGLS = 10-24] | | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| | Kupffer Cell | Pigmentation | Moderate |
| [Leukemia Mononuclear TGLS = 12-6] | | | |
| * Lung | Alveolar Epith | Hyperplasia | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| [Infiltration Cellular TGLS = 16-2] | | | |
| Lymph Node | Mediastinal | Leukemia Mononuclear | |
| | Pancreatic | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 766

TRT#: 1

SEX: Male

DAY ON TEST: 892

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63023

ORGAN AND ACCOUNTABLE SITE STATUS

Renal		Leukemia Mononuclear	
Pancreatic		Pigmentation	Mild
Renal		Pigmentation	Marked
[Leukemia Mononuclear TGLS = 15-3-1]			
[Leukemia Mononuclear TGLS = 9-7-3]			
[Leukemia Mononuclear TGLS = 13-25]			
[Pigmentation TGLS = 13-25]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Hyperplasia	Moderate
[Hyperplasia TGLS = 3-8]			
Mesentery		Accessory Spleen	
[Accessory Spleen TGLS = 8-23]			
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Cyst	Moderate
[Cyst TGLS = 17-1]			
* Preputial Gland		Cyst	Moderate
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLS = 1-21]			
* Spleen		Fibrosis	Moderate
[Fibrosis TGLS = 7-22]		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 5-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 767

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Moderate
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Pancreatic	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-5]			
* Preputial Gland		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 767

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61401

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 3-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 768

TRT#: 1

SEX: Male

DAY ON TEST: 603

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60060

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Degeneration	Cystic, Mild
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Moderate
	[Hepatodiaphragmatic Nodule TGLS = 7-21]		
	[Leukemia Mononuclear TGLS = 5-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 6-3-1]		
	[Leukemia Mononuclear TGLS = 4-7-3]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-6]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 768

TRT#: 1

SEX: Male

DAY ON TEST: 603

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60060

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 2-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 769

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63024

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
* Lung		Alveolar/Bronchiolar Adenoma	
	[Alveolar/Bronchiolar Adenoma TGLS = 4-22]		
* Lymph Node, Mandibular		Pigmentation	Mild
* Spleen		Fibrosis	Moderate
	[Fibrosis TGLS = 2-21]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 770

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61677

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
* Bone Marrow		Hyperplasia	Moderate
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
* Nose		Foreign Body	
	Goblet Cell Mucosa	Hyperplasia Metaplasia	Mild Squamous, Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Cyst	Moderate
* Preputial Gland		Carcinoma	
		[Carcinoma TGLS = 2-22]	
* Prostate		Inflammation	Suppurative, Minimal
* Skin	Subcut Tiss	Fibroma	
		[Fibroma TGLS = 1-21]	
* Spleen		Fibrosis Hematopoietic Cell Proliferation	Minimal Moderate
		[Fibrosis TGLS = 3-23]	
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 770

TRT#: 1

SEX: Male

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61677

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Preputial Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 771

TRT#: 1

SEX: Male

DAY ON TEST: 822

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62161

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Pancreas	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Parathyroid Gland	* Pituitary Gland
---------------------	-------------------

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Minimal
		Thrombosis	Mild
		[Thrombosis TGLS = 8-5-1]	
* Intestine Small, Duodenum		Ulcer	Moderate
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver		Angiectasis	Moderate
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Focal, Moderate
		[Angiectasis TGLS = 7-23]	
		[Leukemia Mononuclear TGLS = 6-6]	
		[Necrosis TGLS = 7-23]	
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 771	TRT#: 1	SEX: Male	DAY ON TEST: 822
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-62161

ORGAN AND ACCOUNTABLE SITE STATUS			
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 9-3-1]		
	[Pigmentation TGLS = 9-3-1]		
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 1-21]		
Mesentery	Fat	Necrosis	Mild
	[Necrosis TGLS = 4-22]		
* Nose	Mucosa	Hyperplasia	Moderate
		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-6]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 3-7]		

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
-------------------------------	------------------------------

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 772

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-10]			
* Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Hemorrhage	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
[Hemorrhage TGLS = 9-2]			
[Leukemia Mononuclear TGLS = 9-2]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 10-3-1]			
[Leukemia Mononuclear TGLS = 6-7]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 772

TRT#: 1

SEX: Male

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62162

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric

Leukemia Mononuclear

* Mammary GI

Note: No correlating lesion to TGL 1-8.

* Prostate

Inflammation

Suppurative, Minimal

* Spleen

Fibrosis

Moderate

Leukemia Mononuclear

[Fibrosis TGLS = 5-21]

[Leukemia Mononuclear TGLS = 4-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 3-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 773

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

INSUFFICIENT TISSUE

* Adrenal Medulla

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-10]			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]		Pigmentation	Moderate
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 773

TRT#: 1

SEX: Male

DAY ON TEST: 732

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61402

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 2-7]

* Thyroid Gland

Follicular Cel

Carcinoma

[Carcinoma TGLS = 7-3]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Thyroid Gland Follicular Cel Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 774

TRT#: 1

SEX: Male

DAY ON TEST: 590

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60061

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 10-1-1,11-1]			
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Minimal
[Leukemia Mononuclear TGLS = 7-6]			
* Lung		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-2]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 9-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
[Dilatation TGLS = 1-8]			
* Pancreas		Atrophy	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 774

TRT#: 1

SEX: Male

DAY ON TEST: 590

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60061

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
		Necrosis	Moderate
	[Leukemia Mononuclear TGLS = 3-6]		
	[Necrosis TGLS = 4-21]		
* Stomach, Glandular		Edema	Moderate
		Leukemia Mononuclear	
		Ulcer	Moderate
	[Leukemia Mononuclear TGLS = 12-4]		
	[Ulcer TGLS = 12-4]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 2-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 775

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62961

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Degeneration Hypertrophy Hyperplasia	Mild Fatty, Moderate Focal, Moderate Moderate
* Adrenal Medulla		Cardiomyopathy	Minimal
* Heart		Parasite Metazoan	
* Intestine Large, Colon		Nephropathy	Mild
* Kidney		Angiectasis	Minimal
* Liver	Bile Duct	Degeneration Hyperplasia Leukemia Mononuclear	Cystic, Mild Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Leukemia Mononuclear Pigmentation	
* Mammary Gland		Fibroadenoma Hyperplasia	Mild Moderate
[Fibroadenoma TGLS = 1-21]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-22]			
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 775

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62961

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 2-7]

* Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 776

TRT#: 1

SEX: Male

DAY ON TEST: 612

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60062

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Blood Vessel | * Bone | * Epididymis | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Mammary Gland | * Nose |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--------------------------------------|-------------|-----------------------------------|---------|
| * Adrenal Cortex | | Accessory Adrenal Cortical Nodule | Mild |
| | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 4-10] | | | |
| * Adrenal Medulla | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Brain | | Leukemia Mononuclear | |
| * Heart | | Leukemia Mononuclear | |
| * Intestine Large, Colon | | Parasite Metazoan | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 5-6] | | | |
| * Lung | | Edema | Mild |
| | | Leukemia Mononuclear | |
| Lymph Node | Mediastinal | Leukemia Mononuclear | |
| | Pancreatic | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 6-3] | | | |
| [Leukemia Mononuclear TGLS = 3-21] | | | |
| * Lymph Node, Mandibular | | Pigmentation | Mild |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 776	TRT#: 1	SEX: Male	DAY ON TEST: 612
	DOSE: UNTREATDCONTROL	DISP: Natural Death	HISTO: 91-60062

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Atrophy	Mild
		Leukemia Mononuclear	
Note: PANCREAS IS ON SLIDE 21.			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 777

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Salivary Glands	* Skin
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-10]			
* Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Heart		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 11-5-1]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 19-27]			
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-2]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Iliac	Leukemia Mononuclear	
	Inguinal	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 777

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61403

ORGAN AND ACCOUNTABLE SITE STATUS

	Popliteal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
		Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 13-3-1]		
	[Leukemia Mononuclear TGLS = 15-26]		
	[Leukemia Mononuclear TGLS = 14-25]		
	[Leukemia Mononuclear TGLS = 10-24]		
	[Leukemia Mononuclear TGLS = 9-23]		
	[Leukemia Mononuclear TGLS = 2-21]		
	[Leukemia Mononuclear TGLS = 18-7-3]		
	[Leukemia Mononuclear TGLS = 3-8]		
	[Pigmentation TGLS = 9-23]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 1-8]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 16-1]		
* Preputial Gland		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Minimal
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-6,6-22]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 4-7]		
* Thymus		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 17-3]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 777

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61403

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 778

TRT#: 1

SEX: Male

DAY ON TEST: 759

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Mammary Gland

INSUFFICIENT TISSUE

* Intestine Large, Rectum

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
	Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Hyperplasia	Moderate
	Kupffer Cell	Pigmentation	Moderate
	[Hyperplasia TGLS = 3-6]		
	[Hyperplasia TGLS = 3-6]		
* Pancreas		Atrophy	Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen	Lymph Follic	Atrophy	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 2-7]		

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 779

TRT#: 1

SEX: Male

DAY ON TEST: 641

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61013

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Epididymis		Atypia Cellular	Moderate
* Kidney		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 7-6]		
* Lung		Leukemia Mononuclear	
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 5-7-3]		
	[Leukemia Mononuclear TGLS = 10-3-1]		
	[Leukemia Mononuclear TGLS = 8-21]		
	[Leukemia Mononuclear TGLS = 9-22]		
	[Pigmentation TGLS = 9-22]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 779

TRT#: 1

SEX: Male

DAY ON TEST: 641

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61013

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 6-5]			
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 2-8-2]			
* Nose	Goblet Cell	Hyperplasia	Minimal
	Mucosa	Hyperplasia	Minimal
	Mucosa	Metaplasia	Squamous, Mild
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Distalis	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	
[Angiectasis TGLS = 11-1]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Stomach, Forestomach		Hyperplasia	Mild
		Ulcer	Mild
[Hyperplasia TGLS = 12-23]			
[Ulcer TGLS = 12-23]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[Adenoma TGLS = 3-7]			
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 780

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63025

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
	Bile Duct	Hyperplasia	Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
[Hyperplasia TGLS = 3-2-1]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Prostate		Inflammation	Suppurative, Moderate
* Skin		Basal Cell Carcinoma	
[Basal Cell Carcinoma TGLS = 2-21]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7,4-7]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 781

TRT#: 1

SEX: Male

DAY ON TEST: 626

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60157

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
		Thrombosis	Moderate
	[Thrombosis TGLS = 10-5-1]		
* Kidney	Renal Tubule	Atrophy	Mild
		Nephropathy	Minimal
	[Atrophy TGLS = 5-23]		
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 9-3-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-5]		
Mesentery	Fat	Necrosis	Moderate
	[Necrosis TGLS = 8-22]		
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 781	TRT#: 1	SEX: Male	DAY ON TEST: 626
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 91-60157

ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate		Inflammation	Suppurative, Minimal
* Skin		Hyperkeratosis	Moderate
[Hyperkeratosis TGLS = 7-21,11-24]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 782

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62962

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Moderate
* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Malignant	
	[Pheochromocytoma Malignant TGLS = 4-10]		
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Intestine Small, Jejunum		Leiomyosarcoma	
	[Leiomyosarcoma TGLS = 6-23]		
* Kidney		Nephropathy	Moderate
* Mammary Gland		Hyperplasia	Mild
* Pancreas		Atrophy	Mild
* Spleen		Fibrosis	Moderate
		Pigmentation	Hemosiderin, Mild
	[Fibrosis TGLS = 3-22]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 783

TRT#: 1

SEX: Male

DAY ON TEST: 484

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-59706

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

AUTO PRECLUDES DIAG.

* Islets, Pancreatic	* Pancreas
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OBSERVATIONS

* Liver		Leukemia Mononuclear	
* Lung		Edema	Mild
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 2-8]		
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-6]		
* Stomach, Glandular		Erosion	Mild
	[Erosion TGLS = 7-4,7-4-1]		
* Testes	Interstit Cell	Adenoma	
	[Adenoma TGLS = 4-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 784

TRT#: 1

SEX: Male

DAY ON TEST: 780

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61678

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Degeneration Leukemia Mononuclear	Minimal Fatty, Mild
* Adrenal Medulla		Leukemia Mononuclear	
* Bone	Femur	Osteopetrosis	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Esophagus			
Note: ESOPHAGUS IS PRESENT ON SLIDE 23.			
* Heart		Cardiomyopathy	Mild
* Kidney	Transit Epithe	Hyperplasia Infiltration Cellular Leukemia Mononuclear	Minimal Lipocyte, Moderate
	Renal Tubule	Nephropathy Pigmentation	Mild Mild
	[Leukemia Mononuclear TGLS = 7-24,8-5]		
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear Necrosis	Moderate Focal, Minimal
	[Leukemia Mononuclear TGLS = 9-6]		
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-7]		
* Mammary Gland		Dilatation	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 784	TRT#: 1	SEX: Male	DAY ON TEST: 780
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61678

ORGAN AND ACCOUNTABLE SITE STATUS

		Fibroadenoma	
[Fibroadenoma TGLS = 2-22]			
Mesentery		Leukemia Mononuclear	
Note: LESION ON SLIDE 23 INCLUDES LIVER AND DIAPHRAGM HEAVILY INFILTRATED WITH LEUKEMIA CELLS.			
[Leukemia Mononuclear TGLS = 6-23]			
* Nose	Mucosa	Hyperplasia Inflammation	Minimal Suppurative, Mild
	Mucosa	Metaplasia	Squamous, Mild
* Pancreas		Atrophy	Moderate
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Marked
* Prostate	Epithelium	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thymus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear		
CONTRIBUTORY CAUSE OF DEATH	- Mammary Gland Fibroadenoma		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 785

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Minimal
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver		Nephropathy	Minimal
		Eosinophilic Focus	Mild
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 9-3-1]			
[Leukemia Mononuclear TGLS = 7-24]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Moderate
[Necrosis TGLS = 4-22]			
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	Moderate
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLS = 2-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 785	TRT#: 1	SEX: Male	DAY ON TEST: 730
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61404

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[Fibrosis TGLS = 6-23] [Leukemia Mononuclear TGLS = 5-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 786

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63026

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Eosinophilic Focus	Moderate
		Leukemia Mononuclear	
[Eosinophilic Focus TGLS = 3-21,4-22]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Goblet Cell	Hyperplasia	Minimal
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 787

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62963

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex		Carcinoma	Metastatic (Thyroid Gland)
* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	Multiple
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	Minimal
		Carcinoma	Metastatic (Thyroid Gland)
[Carcinoma TGLS = 2-22]			
* Lung		Carcinoma	Metastatic (Thyroid Gland)
Lymph Node	Deep Cervical	Carcinoma	Metastatic (Thyroid Gland)
	Mediastinal	Hemorrhage	Moderate
	Mediastinal	Pigmentation	Moderate
[Carcinoma TGLS = 5-23]			
[Hemorrhage TGLS = 7-3-1]			
[Pigmentation TGLS = 7-3-1]			
* Lymph Node, Mandibular		Carcinoma	Metastatic (Thyroid Gland)
		Hemorrhage	Minimal
		Hyperplasia	Lymphoid, Moderate
* Mammary Gland		Carcinoma	
[Carcinoma TGLS = 1-21]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 787

TRT#: 1

SEX: Male

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62963

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes [Adenoma TGLS = 3-7]	Bilateral, Interstit Cell	Adenoma
* Thymus Note: THYMUS IS ON SLIDE 3-1.		
* Thyroid Gland [Carcinoma TGLS = 4-3]	Follicular Cel	Carcinoma
* Trachea Note: HYPERPLASIA AND SQUAMOUS METAPLASIA OF TRACHEAL MUCOSA; CONSIDERED SECONDARY TO THYROID GLAND CARCINOMA; NOT CODED ON TDMS.		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 788

TRT#: 1

SEX: Male

DAY ON TEST: 569

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-59832

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lung	* Lymph Node, Mandibular
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration Hemorrhage Hyperplasia	Fatty, Moderate Moderate Diffuse, Moderate
[Degeneration TGLS = 4-10]			
[Hemorrhage TGLS = 4-10]			
[Hyperplasia TGLS = 4-10]			
* Adrenal Medulla		Hyperplasia	Marked
[Hyperplasia TGLS = 4-10]			
* Epididymis		Atypia Cellular	Moderate
* Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 5-5]			
* Lymph Node, Mesenteric		Hemorrhage	Moderate
[Hemorrhage TGLS = 6-5]			
* Nose		Foreign Body Hyperplasia Hyperplasia Inflammation	Mild Moderate Suppurative, Mild
	Goblet Cell		
	Mucosa		
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-1]			
* Spleen	Lymph Follic	Atrophy	Moderate
[Atrophy TGLS = 3-6]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 788

TRT#: 1

SEX: Male

DAY ON TEST: 569

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-59832

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Interstit Cell

Adenoma

Atrophy

Moderate

Interstit Cell

Hyperplasia

Mild

[Atrophy TGLS = 2-7]

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 789

TRT#: 1

SEX: Male

DAY ON TEST: 900

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63027

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	Peripheral Nerve
* Salivary Glands	* Seminal Vesicle	Spinal Cord	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
* Adrenal Medulla		Pheochromocytoma Benign	Multiple
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
		Thrombosis	Marked
[Thrombosis TGLS = 5-5-1]			
* Intestine Large, Cecum		Edema	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-2,6-2-1]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Pituitary Gland	Pars Distalis	Cyst	Moderate
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
		Keratoacanthoma	
[Fibroma TGLS = 2-22]			
[Keratoacanthoma TGLS = 1-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 789

TRT#: 1

SEX: Male

DAY ON TEST: 900

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63027

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Skin Subcut Tiss Fibroma;Skin Keratoacanthoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 790

TRT#: 1

SEX: Male

DAY ON TEST: 796

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration Hypertrophy Leukemia Mononuclear	Fatty, Minimal Focal, Minimal
[Leukemia Mononuclear TGLS = 7-10]			
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy Leukemia Mononuclear	Minimal
* Kidney		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-22]			
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Mild
[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Hemorrhage Infiltration Cellular Leukemia Mononuclear	Mild Histiocyte, Mild
[Hemorrhage TGLS = 11-2]			
[Leukemia Mononuclear TGLS = 11-2]			
Lymph Node	Deep Cervical Iliac Mediastinal Popliteal	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 790

TRT#: 1

SEX: Male

DAY ON TEST: 796

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62163

ORGAN AND ACCOUNTABLE SITE STATUS

		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 13-24]			
[Leukemia Mononuclear TGLS = 1-21]			
[Leukemia Mononuclear TGLS = 9-23]			
[Leukemia Mononuclear TGLS = 12-3-1]			
[Leukemia Mononuclear TGLS = 14-25]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	
* Preputial Gland		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thymus		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 15-3]			
* Thyroid Gland	C Cell	Adenoma	
Tongue		Squamous Cell Carcinoma	
[Squamous Cell Carcinoma TGLS = 10-26]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
 CONTRIBUTORY CAUSE OF DEATH - Tongue Squamous Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 791

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53125

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 792

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53126

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Liver | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

- | | | |
|----------|----------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | | |

Note: MINIMAL MINERALIZATION IN RENAL PARENCHYMA; NOT CODED ON TDMS.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 793

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53127

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Heart

Note: MILD SUBACUTE INFLAMMATION IN BLOOD VESSEL; NOT CODED ON TDMS.

* Pituitary Gland

Pars Distalis

Cyst

* Thyroid Gland

Ultimobranchial Cyst

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:01
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 794

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53128

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 795

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53129

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex	Accessory Adrenal Cortical Nodule	
* Heart	Cardiomyopathy	Minimal
* Kidney	Nephropathy	Minimal
* Prostate	Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:01

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 796

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53130

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Heart	Cardiomyopathy	Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 797

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53131

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Thymus	Hemorrhage	Minimal
[Hemorrhage TGLS = 2-3]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 798

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53132

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Prostate	Inflammation	Suppurative, Minimal
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Note: MINIMAL LYMPHOID HYPERPLASIA IN PROSTATE; NOT CODED ON TDMS.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 799

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Lymph Node, Mesenteric		Hemorrhage	Minimal
* Pituitary Gland	Pars Intermed	Cyst	
* Thyroid Gland		Ultimobranchial Cyst	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 800

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53134

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Liver
* Nose
* Preputial Gland
* Skin
* Testes
* Urinary Bladder

* Blood Vessel
* Epididymis
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Pancreas
* Prostate
* Spleen
* Thymus

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Parathyroid Gland
* Salivary Glands
* Stomach, Forestomach
* Thyroid Gland

* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Kidney
* Mammary Gland
* Pituitary Gland
* Seminal Vesicle
* Stomach, Glandular
* Trachea

OBSERVATIONS

* Adrenal Cortex
* Lung

Alveolar Epith

Accessory Adrenal Cortical Nodule
Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 801

TRT#: 3

SEX: Male

DAY ON TEST: 820

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62175

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	Skeletal Muscle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Bone	Femur	Osteopetrosis	Moderate
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
Note: AREAS OF NECROSIS IN BONE MARROW; NOT CODED ON TDMS.			
* Brain		Necrosis	Mild
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Mild
* Liver		Degeneration	Cystic, Marked
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Necrosis	Focal, Marked
	Kupffer Cell	Pigmentation	Mild
		[Leukemia Mononuclear TGLS = 4-6]	
		[Necrosis TGLS = 4-6]	
* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Minimal
		[Hyperplasia TGLS = 7-2-1]	
* Lymph Node, Mesenteric		Ectasia	Moderate
* Pituitary Gland	Pars Distalis	Leukemia Mononuclear	
Skel Muscle		Hyperplasia	Focal, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 801	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 820 HISTO: 92-62175
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ORGAN AND ACCOUNTABLE SITE STATUS

Note: TISSUE ADJACENT TO SKEL MUSCLE ON SLIDE 21 CONSIDERED NORMAL FAT.

* Skin [Keratoacanthoma TGLS = 6-22,6-22-1]		Keratoacanthoma	
* Spleen [Leukemia Mononuclear TGLS = 2-6] [Necrosis TGLS = 2-6]		Leukemia Mononuclear Necrosis	Marked
* Testes [Adenoma TGLS = 1-7]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Skin	Keratoacanthoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 802

TRT#: 3

SEX: Male

DAY ON TEST: 866

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62532

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Moderate
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Mild
* Epididymis		Atypia Cellular	Moderate
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
	Renal Tubule	Nephropathy	Moderate
		Pigmentation	Mild
		[Leukemia Mononuclear TGLS = 6-5]	
		[Pigmentation TGLS = 6-5]	
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Thrombosis	Mild
		[Leukemia Mononuclear TGLS = 7-6]	
* Lung		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 10-2,10-2-1]	
Lymph Node	Pancreatic	Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 5-7-3]	
* Mammary Gland		Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 802	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 866 HISTO: 92-62532
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ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [Leukemia Mononuclear TGLS = 12-1]		Leukemia Mononuclear	
* Preputial Gland [Carcinoma TGLS = 2-22]		Carcinoma	
* Skin [Fibroma TGLS = 1-21]	Subcut Tiss	Fibroma	
* Spleen [Leukemia Mononuclear TGLS = 4-6]		Leukemia Mononuclear	
* Testes [Adenoma TGLS = 3-7]	Bilateral, Interstit Cell	Adenoma	
Tongue [Hyperplasia TGLS = 8-23]	Epithelium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Preputial Gland Carcinoma;Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 803

TRT#: 3

SEX: Male

DAY ON TEST: 759

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
		Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 5-6]		
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
	[Infiltration Cellular TGLS = 6-2]		
	[Leukemia Mononuclear TGLS = 6-2]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	Moderate
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-6]		
* Stomach, Forestomach		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 803

TRT#: 3

SEX: Male

DAY ON TEST: 759

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61574

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 2-7]

* Thyroid Gland

C Cell

Carcinoma

[Carcinoma TGLS = 1-21]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Thyroid Gland C Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 804

TRT#: 3

SEX: Male

DAY ON TEST: 796

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62176

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric	* Nose
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Moderate
		Hypertrophy	Focal, Moderate
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Hyperplasia	Mild
[Hyperplasia TGLS = 1-8]			
* Pancreas		Atrophy	Minimal
* Preputial Gland		Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Interstit Cell	Adenoma	
		Atrophy	Marked
[Adenoma TGLS = 3-7]			
[Atrophy TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 805

TRT#: 3

SEX: Male

DAY ON TEST: 895

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-63042

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Nose | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---|---------------------------|----------------------------------|----------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Moderate |
| * Kidney | | Inflammation | Suppurative, Minimal |
| | | Nephropathy | Mild |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Dilatation | Minimal |
| [Dilatation TGLS = 1-8] | | | |
| * Pancreas | | Atrophy | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLS = 3-1] | | | |
| * Skin | | Cyst Epithelial Inclusion | |
| [Cyst Epithelial Inclusion TGLS = 2-21] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Testes | Bilateral, Interstit Cell | Adenoma | |

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 806

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63043

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Angiectasis	Moderate
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 4-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Mild
* Mammary Gland		Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Note: TWO SEPARATE ADENOMAS APPEAR TO BE PRESENT IN PARS DISTALIS.		
	[Adenoma TGLS = 5-1]		
* Preputial Gland		Hyperplasia	Mild
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLS = 1-21]		
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 3-7]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 807

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63044

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Heart		Cardiomyopathy	Moderate
* Islets, Pancreatic		Adenoma	
* Kidney	Renal Tubule	Atrophy	Mild
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Nose	Globet Cell	Hyperplasia	Minimal
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Distalis	Hyperplasia	Focal, Moderate
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild
[Leukemia Mononuclear TGLS = 2-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 808

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63045

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
Mesentery	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLS = 3-2-1]		
* Nose	Goblet Cell	Hyperplasia	Mild
	Mucosa	Hyperplasia	Mild
	Mucosa	Metaplasia	Squamous, Mild
Oral Mucosa		Squamous Cell Papilloma	
	[Squamous Cell Papilloma TGLS = 4-9-2]		
Peritoneum		Mesothelioma Malignant	
	Note: MESOTHELIO MAL IS ON SLIDES 7 AND 7-1 ASSOC. WITH THE EPIDIDYMIS AND TESTIS.		
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	Follicle	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 809

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
Tooth	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-10]			
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Brain		Astrocytoma Malignant	
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Mild
[Nephropathy TGLS = 8-5]			
* Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
		Necrosis	Focal, Mild
	Kupffer Cell	Pigmentation	Moderate
[Hepatodiaphragmatic Nodule TGLS = 10-21]			
[Leukemia Mononuclear TGLS = 9-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 4-23]			
[Leukemia Mononuclear TGLS = 13-3-1]			
* Lymph Node, Mandibular		Ectasia	Marked
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 809	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 730 HISTO: 92-61405
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ORGAN AND ACCOUNTABLE SITE STATUS

[Ectasia TGLS = 1-8] [Leukemia Mononuclear TGLS = 1-8] * Lymph Node, Mesenteric		Ectasia Leukemia Mononuclear	Moderate
* Prostate * Spleen		Inflammation Fibrosis Leukemia Mononuclear	Suppurative, Minimal Mild
[Fibrosis TGLS = 6-22] [Leukemia Mononuclear TGLS = 5-6] * Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7] * Thyroid Gland Tongue	C Cell	Adenoma Squamous Cell Papilloma	
[Squamous Cell Papilloma TGLS = 12-24]			

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Brain	Astrocytoma Malignant;Tongue Squamous Cell Papilloma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 810

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63046

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-6]		
* Lung		Hemorrhage	Mild
		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Vomeronas Org	Adenoma	
	Goblet Cell	Hyperplasia	Mild
Peritoneum		Mesothelioma Malignant	
	Note: MESOTHELIO MAL IS ON SLIDES 7 AND 7-1.		
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Minimal
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
	[Fibrosis TGLS = 1-21]		
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 810

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63046

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 2-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 811

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Pituitary Gland

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-10]			
* Bone Marrow		Leukemia Mononuclear	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Minimal
* Liver		Degeneration	Cystic, Moderate
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-6]		Pigmentation	Mild
* Lung		Carcinoma	Metastatic (Thyroid Gland)
[Carcinoma TGLS = 8-2]			
Lymph Node	Deep Cervical	Carcinoma	Metastatic (Thyroid Gland)
	Deep Cervical	Leukemia Mononuclear	
[Carcinoma TGLS = 10-22]			
[Leukemia Mononuclear TGLS = 10-22]			
* Lymph Node, Mandibular		Pigmentation	Mild
[Pigmentation TGLS = 1-8]			
* Nose		Foreign Body	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 811	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 732 HISTO: 92-61406
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ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Inflammation	Suppurative, Minimal
* Spleen		Atrophy	Moderate
		Fibrosis	Marked
		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild
[Fibrosis TGLS = 5-21]			
[Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			
* Thyroid Gland	C Cell	Carcinoma	
[Carcinoma TGLS = 9-3]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH - Thyroid Gland C Cell Carcinoma

Animal Note: METASTATIC THYROID GLAND C CELL CARCINOMA ON SLIDE 8 IN INTERSTITIAL TISSUE OF SALIVARY GLANDS; NOT CODED ON TDMS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 812

TRT#: 3

DOSE: 0.5%

SEX: Male

DISP: Natural Death

DAY ON TEST: 855

HISTO: 92-62379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex [Leukemia Mononuclear TGLS = 9-10]		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Heart		Thrombosis	Mild
* Intestine Large, Cecum		Parasite Metazoan	
* Kidney [Nephropathy TGLS = 10-5]		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Mammary Gland [Dilatation TGLS = 4-8]		Dilatation	Mild
* Pancreas		Atrophy	Mild
* Prostate	Epithelium	Hyperplasia	Minimal
* Skin [Edema TGLS = 3-21]	Subcut Tiss	Edema	Moderate
* Spleen [Leukemia Mononuclear TGLS = 8-6]		Leukemia Mononuclear	
* Stomach, Glandular [Erosion TGLS = 11-4]		Erosion	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 812

TRT#: 3

SEX: Male

DAY ON TEST: 855

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-62379

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 7-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 813

TRT#: 3

SEX: Male

DAY ON TEST: 837

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62177

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 10-10]			
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Moderate
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
Eye		Cataract	Moderate
	Retina	Degeneration	Marked
[Cataract TGLS = 1-21]			
* Heart		Cardiomyopathy	Mild
* Kidney		Calculus Micro Observation Only Hydronephrosis	Moderate
	Transit Epithe	Hyperplasia Leukemia Mononuclear	Moderate
	Renal Tubule	Nephropathy Pigmentation	Mild Mild
[Calculus Micro Observation Only TGLS = 9-23]			
[Leukemia Mononuclear TGLS = 8-5]			
[Nephropathy TGLS = 7-5]			
* Liver		Hepatodiaphragmatic Nodule Leukemia Mononuclear Necrosis	Focal, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 813

TRT#: 3

SEX: Male

DAY ON TEST: 837

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62177

ORGAN AND ACCOUNTABLE SITE STATUS

[Hepatodiaphragmatic Nodule TGLS = 11-24]			
[Leukemia Mononuclear TGLS = 12-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 6-26]			
[Leukemia Mononuclear TGLS = 14-3-1]			
[Leukemia Mononuclear TGLS = 13-25]			
[Pigmentation TGLS = 13-25]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Mammary Gland		Galactocele	Mild
[Galactocele TGLS = 2-22]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Cyst	Moderate
* Preputial Gland		Inflammation	Chronic, Moderate
* Prostate		Inflammation	Suppurative, Marked
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]			
* Stomach, Glandular		Edema	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			
* Thyroid Gland	C Cell	Adenoma	Multiple
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 814

TRT#: 3

SEX: Male

DAY ON TEST: 817

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62178

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Brain		Atrophy	Moderate
[Atrophy TGLS = 3-1-1]			
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Moderate
Lymph Node	Pancreatic	Pigmentation	Moderate
[Pigmentation TGLS = 2-21]			
* Mammary Gland		Dilatation	Mild
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 4-1-1]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Pigmentation	Hemosiderin, Mild
* Stomach, Forestomach		Erosion	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 815

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63047

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Eosinophilic Focus	Mild
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
* Nose	Goblet Cell	Hyperplasia	Mild
* Pancreas		Atrophy	Moderate
* Spleen		Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 816

TRT#: 3

SEX: Male

DAY ON TEST: 845

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Thymus

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
		Necrosis	Mild
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
		Pheochromocytoma Malignant	
	[Pheochromocytoma Malignant TGLS = 4-21]		
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
		Thrombosis	Mild
* Intestine Large, Rectum		Erosion	Marked
* Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
	[Nephropathy TGLS = 3-5]		
* Liver		Degeneration	Cystic, Minimal
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Marked
	[Leukemia Mononuclear TGLS = 5-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLS = 6-2]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 816

TRT#: 3

SEX: Male

DAY ON TEST: 845

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62380

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular

Leukemia Mononuclear

* Pancreas

Acinus

Cytoplasmic Alteration

Moderate

* Pituitary Gland

Pars Distalis

Cyst

Moderate

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Adrenal Medulla Pheochromocytoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 817

TRT#: 3

SEX: Male

DAY ON TEST: 796

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62179

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Bone		Osteosarcoma	
[Osteosarcoma TGLS = 2-22]			
Eye		Cataract	Mild
[Cataract TGLS = 1-21]	Retina	Degeneration	Moderate
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Adenoma	
[Adenoma TGLS = 3-7-3]			
* Kidney		Nephropathy	Mild
* Liver		Inflammation	Subacute, Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Spleen		Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Bone Osteosarcoma

CONTRIBUTORY CAUSE OF DEATH

- Islets;Pancreatic Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 818

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63048

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Pituitary Gland

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
		Thrombosis	Moderate
	[Thrombosis TGLS = 5-5-1]		
* Intestine Large, Colon		Parasite Metazoan	
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
	Renal Tubule	Pigmentation	Moderate
* Lung		Infiltration Cellular	Histiocyte, Mild
Lymph Node	Mediastinal	Pigmentation	Moderate
	[Pigmentation TGLS = 6-3-1]		
* Nose	Goblet Cell	Hyperplasia	Mild
Peritoneum		Mesothelioma Malignant	
	Note: MESOTHELIO MAL IS ALSO ON SLIDES 6, 7, 7-1 AND 8.		
	[Mesothelioma Malignant TGLS = 1-21]		
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 2-7,3-7]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 818

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63048

ORGAN AND ACCOUNTABLE SITE STATUS

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 819

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62964

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Brain		Atrophy	Marked
[Atrophy TGLS = 7-1-1]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-22]			
* Liver		Cyst	Moderate
		Leukemia Mononuclear	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[Cyst TGLS = 5-23]			
* Lymph Node, Mandibular		Hemorrhage	Mild
* Mammary Gland		Fibroadenoma	
		Hyperplasia	Mild
[Fibroadenoma TGLS = 1-21]			
* Pituitary Gland		Adenoma	
[Adenoma TGLS = 6-1-1]	Pars Distalis		
* Spleen		Leukemia Mononuclear	
* Testes		Adenoma	
[Adenoma TGLS = 3-7]	Bilateral, Interstit Cell		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 820

TRT#: 3

SEX: Male

DAY ON TEST: 677

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61145

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
Note: No correlating lesion to TGL 5-10.			
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
Note: TGL 6-22 IS AN ATROPHIED LIVER LOBE CONTAINING NUMEROUS PIGMENT-BEARING MACROPHAGES; NOT CODED ON TDMS.			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Pancreatic	Pigmentation	Moderate
		[Leukemia Mononuclear TGLS = 7-3-1]	
		[Leukemia Mononuclear TGLS = 4-7-3]	
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pancreas		Atrophy	Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Fibrosis	Moderate
		Hematopoietic Cell Proliferation	Mild
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 820

TRT#: 3

SEX: Male

DAY ON TEST: 677

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61145

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibrosis TGLS = 3-21]

[Hematopoietic Cell Proliferation TGLS = 2-6]

[Leukemia Mononuclear TGLS = 2-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 821

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63049

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Pituitary Gland

OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Inflammation	Suppurative, Minimal
		Nephropathy	Moderate
* Liver		Degeneration	Cystic, Minimal
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	Minimal
	[Eosinophilic Focus TGLS = 3-22]		
* Spleen		Fibrosis	Mild
	[Fibrosis TGLS = 2-21]		
* Stomach, Forestomach		Squamous Cell Papilloma	
	[Squamous Cell Papilloma TGLS = 4-23]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 822

TRT#: 3

SEX: Male

DAY ON TEST: 600

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 91-60080

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hematopoietic Cell Proliferation	Mild
* Bone Marrow		Hyperplasia	Mild
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	Moderate
Note: CLEAR CL FOCUS IS ON SLIDE 22			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Iliac	Hyperplasia	Lymphoid, Marked
[Hyperplasia TGLS = 2-21]			
Mesentery		Hemangiosarcoma	
[Hemangiosarcoma TGLS = 5-24,5-24-1]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pancreas		Atrophy	Minimal
* Prostate		Inflammation	Suppurative, Marked
* Spleen		Hematopoietic Cell Proliferation	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH - Mesentery Hemangiosarcoma

CONTRIBUTORY CAUSE OF DEATH - Prostate Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 823

TRT#: 3

SEX: Male

DAY ON TEST: 778

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-61679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
		Thrombosis	Marked
Note: DEGENERATIVE CHANGES IN MYOCARDIUM ASSOCIATED WITH LEUKEMIA MONUC; NOT CODED ON TDMS.			
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
	Kupffer Cell	Leukemia Mononuclear	
		Pigmentation	Moderate
		[Hyperplasia TGLS = 7-6]	
		[Leukemia Mononuclear TGLS = 7-6]	
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 8-2-1,9-2-1]	
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	
		[Fibroadenoma TGLS = 2-21]	
* Pancreas		Atrophy	Moderate
		Leukemia Mononuclear	
* Spleen		Fibrosis	Moderate
		Pigmentation	Hemosiderin, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 823

TRT#: 3

SEX: Male

DAY ON TEST: 778

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-61679

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 5-7,6-7]

* Thyroid Gland

C Cell

Adenoma

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Islets;Pancreatic Adenoma;Mammary Gland Fibroadenoma

Animal Note: ACCESSORY SPLEEN IN MESENTERY ON SLIDE 7; NOT CODED ON TDMS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 824

TRT#: 3

SEX: Male

DAY ON TEST: 745

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Brain		Atrophy	Moderate
[Atrophy TGLS = 5-1-1]			
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 3-21]			
* Lymph Node, Mandibular		Ectasia	Mild
		Hemorrhage	Mild
		Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 4-1-1]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 825

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62946

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Atrophy	Moderate
		Inflammation	Suppurative, Mild
		Nephropathy	Moderate
[Atrophy TGLS = 3-22]			
* Lung	Alveolar Epith	Alveolar/Bronchiolar Adenoma	Multiple
		Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Subacute, Moderate
[Alveolar/Bronchiolar Adenoma TGLS = 6-24]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-21]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 826

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63050

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Marked
		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLS = 3-2]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Ectasia	Moderate
		Leukemia Mononuclear	
* Mammary GI			
	Note: MAMMARY GLAND IS PRESENT ADJACENT TO THE SALIVARY GLAND.		
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibroma	
	[Fibroma TGLS = 4-22]		
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 2-21]		
* Testes	Bilateral, Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 826

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63050

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 827

TRT#: 3

SEX: Male

DAY ON TEST: 890

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-63051

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Moderate
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
* Liver	Bile Duct	Hyperplasia	Moderate
	Centrilobular	Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-6,5-6,6-22]	Necrosis	Mild
* Lung		Leukemia Mononuclear	
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Iliac	Pigmentation	Moderate
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 9-23]		
	[Leukemia Mononuclear TGLS = 8-3-1]		
	[Pigmentation TGLS = 9-23]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-5]		
* Prostate		Leukemia Mononuclear	
* Spleen		Fibrosis	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 827

TRT#: 3

SEX: Male

DAY ON TEST: 890

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-63051

ORGAN AND ACCOUNTABLE SITE STATUS

Leukemia Mononuclear

[Fibrosis TGLS = 2-21]

[Leukemia Mononuclear TGLS = 1-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 7-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 828

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
[Cardiomyopathy TGLS = 5-5-1]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 4-6]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Globet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Fibrosis	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 828	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 730 HISTO: 92-61408
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ORGAN AND ACCOUNTABLE SITE STATUS

[Fibrosis TGLS = 6-21]		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-6,6-21]			
* Stomach, Forestomach		Erosion	Minimal
* Stomach, Glandular		Erosion	Moderate
		Leukemia Mononuclear	
[Erosion TGLS = 7-22]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Heart	Cardiomyopathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 829

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63052

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	Moderate
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

[Adenoma TGLS = 1-7,3-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 830

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62947

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Nose
* Parathyroid Gland	* Pituitary Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Minimal
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Mild
* Liver		Angiectasis	Mild
		Clear Cell Focus	Mild
		Eosinophilic Focus	Moderate
[Eosinophilic Focus TGLS = 3-22]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Moderate
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Pancreas		Atrophy	Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 831

TRT#: 3

SEX: Male

DAY ON TEST: 796

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62180

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Lung		Hemorrhage	Mild
	Alveolar Epith	Hyperplasia	Mild
		Leukemia Mononuclear	
[Hemorrhage TGLS = 5-2]			
[Leukemia Mononuclear TGLS = 5-2]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Marked
	Pancreatic	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 7-21]			
[Leukemia Mononuclear TGLS = 6-3-1]			
[Pigmentation TGLS = 7-21]			
[Pigmentation TGLS = 6-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Nose	Goblet Cell	Hyperplasia	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 831

TRT#: 3

SEX: Male

DAY ON TEST: 796

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62180

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland

Inflammation

Chronic, Mild

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

* Testes

Bilateral, Interstit Cell

Adenoma

Atrophy

Moderate

[Adenoma TGLS = 2-7]

* Thyroid Gland

C Cell

Hyperplasia

Mild

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 832

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62965

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Cecum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Necrosis	Focal, Mild
	Kupffer Cell	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 1-21]		
* Lung		Hemorrhage	Mild
	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
	[Hemorrhage TGLS = 9-2]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 8-3-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 832

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62965

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 7-5]

* Mammary Gland

Dilatation

Mild

* Prostate

Inflammation

Suppurative, Minimal

* Spleen

Fibrosis

Moderate

Leukemia Mononuclear

[Fibrosis TGLS = 3-23]

[Leukemia Mononuclear TGLS = 2-22]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 4-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 833

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62948

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Moderate
* Liver		Eosinophilic Focus	Minimal
* Lung	Alveolar Epith	Hyperplasia Infiltration Cellular	Mild Histiocyte, Mild
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Fibroadenoma Hyperplasia	Minimal
Note: GLANDULAR PORTION OF THE FIBROADENOMA IS LARGELY DEGENERATED. [Fibroadenoma TGLS = 1-21]			
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 834

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62949

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea

MISSING

* Preputial Gland

OBSERVATIONS

* Adren Cortex

Note: DEVELOPMENTAL MALFORMATION IN ADRENAL CORTEX; NOT CODED ON TDMS.

* Epididymis		Atypia Cellular	Moderate
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
* Mammary Gland		Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			
* Skin	Subcut Tiss	Schwannoma Malignant	
[Schwannoma Malignant TGLS = 1-21]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			
* Thyroid Gland	C Cell	Adenoma	
[Adenoma TGLS = 4-3]			
* Urinary Bladder		Papilloma	
[Papilloma TGLS = 3-22]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 835

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62966

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
[Pheochromocytoma Benign TGLS = 3-10]			
* Blood Vessel		Mesothelioma Malignant	
[Mesothelioma Malignant TGLS = 6-23]			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Degeneration	Cystic, Moderate
	Bile Duct	Hyperplasia	Moderate
[Leukemia Mononuclear TGLS = 4-21]		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 7-7-3]			
* Mammary Gland		Dilatation	Mild
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Intermed	Cyst	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 835

TRT#: 3
DOSE: 0.5%

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 912
HISTO: 92-62966

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen		Fibrosis	Mild
		Leukemia Mononuclear Pigmentation	Hemosiderin, Mild
[Fibrosis TGLS = 5-22]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 836

TRT#: 3

SEX: Male

DAY ON TEST: 807

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62181

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
		Osteosarcoma	Metastatic (Bone)
* Bone		Osteosarcoma	
[Osteosarcoma TGLS = 5-21]			
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung		Hemorrhage	Moderate
		Infiltration Cellular	Histiocyte, Moderate
		Osteosarcoma	Metastatic (Bone)
[Osteosarcoma TGLS = 4-2]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Bone Osteosarcoma
 CONTRIBUTORY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 837

TRT#: 3

SEX: Male

DAY ON TEST: 743

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Mammary Gland	* Nose	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney	Renal Tubule	Atrophy	Mild
		Leukemia Mononuclear	
		Nephropathy	Minimal
[Atrophy TGLS = 7-22]			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-23]			
[Leukemia Mononuclear TGLS = 10-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-5]			
* Pancreas		Atrophy	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 837	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 743 HISTO: 92-61409
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ORGAN AND ACCOUNTABLE SITE STATUS

* Prostate	Epithelium	Hyperplasia	Minimal
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
	[Fibrosis TGLS = 6-21]		
	[Leukemia Mononuclear TGLS = 5-6]		
* Stomach, Forestomach		Squamous Cell Papilloma	
	[Squamous Cell Papilloma TGLS = 11-4-1]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 2-7]		

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Squamous Cell Papilloma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 838

TRT#: 3

SEX: Male

DAY ON TEST: 902

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63053

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Intestine Small, Ileum

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
		Hypertrophy	Focal, Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Moderate
[Atrophy TGLS = 9-1-1]			
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Kidney	Transit Epithe	Carcinoma	
		Nephropathy	Moderate
[Nephropathy TGLS = 6-5]			
* Liver		Angiectasis	Mild
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-3-1]			
[Pigmentation TGLS = 8-3-1]			
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
 Test Type: CHRONIC
 Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Test Compound: t-Butylhydroquinone
 CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
 Time Report Requested: 05:03:02
 First Dose M/F: NA / NA
 Lab: SRI

ANIMAL ID: 838	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 902 HISTO: 92-63053
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ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Pigmentation Carcinoma Hyperplasia	Mild Moderate
[Carcinoma TGLS = 2-21] [Hyperplasia TGLS = 1-8]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis Pars Intermed	Adenoma Cyst	Moderate
[Adenoma TGLS = 10-1-1]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hematopoietic Cell Proliferation Leukemia Mononuclear	Moderate
[Hematopoietic Cell Proliferation TGLS = 4-6] [Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7,3-7-3]			

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Kidney Transit Epithe Carcinoma; Mammary Gland Carcinoma; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 839

TRT#: 3

SEX: Male

DAY ON TEST: 828

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62182

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Mandibular	* Nose	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex [Leukemia Mononuclear TGLS = 7-10]		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain [Atrophy TGLS = 11-1-1]		Atrophy Hydrocephalus	Marked Mild
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic Note: ISLETS PANC ADENOMA ALSO ON SLIDE 7. [Adenoma TGLS = 6-21]		Adenoma	Multiple
* Kidney [Nephropathy TGLS = 8-5]		Nephropathy	Marked
* Liver Bile Duct Kupffer Cell Hepatocyte Note: VACUOLIZ CYTO IS ON SLIDE 22. [Leukemia Mononuclear TGLS = 9-22]		Hyperplasia Leukemia Mononuclear Pigmentation Vacuolization Cytoplasmic	Mild Mild Minimal
* Lung Alveolar Epith		Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 839	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 828 HISTO: 92-62182
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ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric [Leukemia Mononuclear TGLS = 10-5]		Leukemia Mononuclear	
* Mammary Gland [Dilatation TGLS = 1-8]		Dilatation	Mild
* Pancreas		Atrophy	Moderate
* Pituitary Gland [Adenoma TGLS = 12-1-1]	Pars Distalis	Adenoma	
* Preputial Gland [Cyst TGLS = 2-8-1]		Cyst	Moderate
* Prostate		Inflammation	Suppurative, Moderate
* Spleen [Leukemia Mononuclear TGLS = 5-6]		Leukemia Mononuclear	
* Testes [Adenoma TGLS = 4-7] [Atrophy TGLS = 3-7]	Interstit Cell	Adenoma Atrophy	Moderate

PRIMARY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Islets;Pancreatic Adenoma;Kidney Nephropathy;Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 840

TRT#: 3

SEX: Male

DAY ON TEST: 671

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-61146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Mammary Gland	* Parathyroid Gland	* Thyroid Gland
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OBSERVATIONS

* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Degeneration	Cystic, Mild
* Lung		Fibrosarcoma	Metastatic (Skin)
		Inflammation	Subacute, Marked
[Fibrosarcoma TGLS = 6-2-1,7-2-2]			
Lymph Node			
Note: CONGESTION OF MEDIASTINAL LYMPH NODE (TGL 2); CONSIDERED AGONAL.			
* Lymph Node, Mandibular		Hemorrhage	Mild
* Skin	Subcut Tiss	Fibrosarcoma	
[Fibrosarcoma TGLS = 1-21]			
* Spleen	Lymph Follic	Atrophy	Moderate
		Pigmentation	Hemosiderin, Moderate
[Atrophy TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 3-7]			

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrosarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 841

TRT#: 3

SEX: Male

DAY ON TEST: 743

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Degeneration	Cystic, Moderate
		Eosinophilic Focus	Marked
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
	[Eosinophilic Focus TGLS = 4-21]		
	[Leukemia Mononuclear TGLS = 3-6]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Foreign Body	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 2-6]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		
* Thyroid Gland	C Cell	Carcinoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 841

TRT#: 3

SEX: Male

DAY ON TEST: 743

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61410

ORGAN AND ACCOUNTABLE SITE STATUS

[Carcinoma TGLS = 5-3]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Thyroid Gland C Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 842

TRT#: 3

SEX: Male

DAY ON TEST: 712

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Malignant	Mild
[Pheochromocytoma Malignant TGLS = 8-24]			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lung		Hemorrhage	Minimal
		Infiltration Cellular	Histiocyte, Minimal
[Hemorrhage TGLS = 11-2]			
[Infiltration Cellular TGLS = 11-2]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
		Leukemia Mononuclear	
	Mediastinal	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 10-3-1]			
[Leukemia Mononuclear TGLS = 1-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Ectasia	Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-5]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 842	TRT#: 3 DOSE: 0.5%	SEX: Male DISP: Moribund Sacrifice	DAY ON TEST: 712 HISTO: 92-61411
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ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery [Accessory Spleen TGLS = 7-23]		Accessory Spleen
* Skin [Basal Cell Adenoma TGLS = 2-22]		Basal Cell Adenoma
* Spleen [Leukemia Mononuclear TGLS = 6-6]		Leukemia Mononuclear
* Testes [Adenoma TGLS = 4-7]	Bilateral, Interstit Cell	Adenoma

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Adrenal Medulla Pheochromocytoma Malignant;Skin Basal Cell Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 843

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62967

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal
		Ultimobranchial Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 844

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62950

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-5]			
* Liver		Degeneration	Cystic, Moderate
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-22]			
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Iliac	Pigmentation	Moderate
	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 6-23]			
[Leukemia Mononuclear TGLS = 9-3-1]			
[Leukemia Mononuclear TGLS = 8-24]			
[Pigmentation TGLS = 9-3-1]			
[Pigmentation TGLS = 8-24]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 844

TRT#: 3
DOSE: 0.5%

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST: 911
HISTO: 92-62950

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 7-5]

* Mammary Gland

Hyperplasia

Mild

* Pituitary Gland

Pars Distalis

Angiectasis

Moderate

Pars Distalis

Cyst

Moderate

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-21]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 5-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 845

TRT#: 3

SEX: Male

DAY ON TEST: 731

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Brain		Atrophy	Moderate
		Hydrocephalus	Moderate
[Atrophy TGLS = 5-1-1]			
* Kidney		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
		Mixed Cell Focus	Moderate
[Mixed Cell Focus TGLS = 4-6-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
* Nose	Globet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 6-1]			
* Preputial Gland		Adenoma	
[Adenoma TGLS = 1-8-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Stomach, Forestomach		Hyperplasia	Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Liver Leukemia Mononuclear;Preputial Gland Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 846

TRT#: 3

SEX: Male

DAY ON TEST: 754

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nose	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Angiectasis	Moderate
[Angiectasis TGLS = 5-22]			
* Lung		Leiomyosarcoma	Metastatic (Stomach, Forestomach)
[Leiomyosarcoma TGLS = 7-2]			
* Mammary Gland		Fibroadenoma	
* Pancreas	Acinus	Leiomyosarcoma	Metastatic (Stomach, Forestomach)
[Leiomyosarcoma TGLS = 3-21]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Stomach, Forestomach		Hyperplasia	Moderate
[Leiomyosarcoma TGLS = 6-23]		Leiomyosarcoma	
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			

PRIMARY CAUSE OF DEATH - Pancreas Acinus Leiomyosarcoma Stomach, Forestomach

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 847

TRT#: 3

SEX: Male

DAY ON TEST: 683

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61147

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Brain		Atrophy	Moderate
[Atrophy TGLS = 5-1-1]			
* Epididymis		Atypia Cellular	Moderate
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Calculus Micro Observation Only	
	Renal Tubule	Dilatation	Moderate
	Transit Epithe	Hyperplasia	Mild
		Nephropathy	Moderate
[Nephropathy TGLS = 3-5]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
		Pigmentation	Mild
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 6-1-1]			
* Spleen		Pigmentation	Hemosiderin, Moderate
* Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			
Zymbal's Gland		Carcinoma	
[Carcinoma TGLS = 4-21,4-21-1]			

PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 847

TRT#: 3

SEX: Male

DAY ON TEST: 683

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61147

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 848

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
* Adrenal Medulla		Pheochromocytoma Benign	Multiple
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
		Thrombosis	Marked
[Thrombosis TGLS = 4-5]			
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Moderate
		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lung		Hemorrhage	Minimal
		Leukemia Mononuclear	
[Hemorrhage TGLS = 5-2]			
[Leukemia Mononuclear TGLS = 5-2]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 2-7]			
[Pigmentation TGLS = 2-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 848

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61414

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric

Leukemia Mononuclear

* Preputial Gland

Inflammation

Chronic, Mild

* Prostate

Inflammation

Suppurative, Mild

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 1-7]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 849

TRT#: 3

SEX: Male

DAY ON TEST: 841

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Nose	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Adrenal Medulla		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Intestine Large, Cecum		Edema	Mild
		Parasite Metazoan	
* Kidney		Nephropathy	Moderate
	Renal Tubule	Pigmentation	Moderate
[Nephropathy TGLS = 6-5]			
[Pigmentation TGLS = 6-5]			
* Liver		Angiectasis	Mild
		Degeneration	Cystic, Moderate
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Thrombosis	Mild
[Angiectasis TGLS = 10-21]			
[Leukemia Mononuclear TGLS = 7-6]			
[Thrombosis TGLS = 10-21]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 849

TRT#: 3

SEX: Male

DAY ON TEST: 841

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62381

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 8-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked
[Leukemia Mononuclear TGLS = 3-6]			
[Necrosis TGLS = 3-6]			
* Stomach, Forestomach		Squamous Cell Papilloma	
[Squamous Cell Papilloma TGLS = 9-4-1]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Stomach;Forestomach Squamous Cell Papilloma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 850

TRT#: 3

SEX: Male

DAY ON TEST: 793

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62183

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney	Renal Tubule	Atrophy	Moderate
		Leukemia Mononuclear	
		Nephropathy	Mild
[Atrophy TGLS = 10-24]			
* Liver		Angiectasis	Mild
		Degeneration	Cystic, Moderate
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
		Necrosis	Focal, Mild
[Degeneration TGLS = 9-23]			
[Eosinophilic Focus TGLS = 8-6]			
[Hyperplasia TGLS = 8-6]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 850

TRT#: 3

SEX: Male

DAY ON TEST: 793

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62183

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 12-3-1]			
[Leukemia Mononuclear TGLS = 11-25]			
[Leukemia Mononuclear TGLS = 7-7]			
[Pigmentation TGLS = 11-25]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 2-8]			
* Preputial Gland		Carcinoma	
[Carcinoma TGLS = 3-21]			
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[Fibrosis TGLS = 5-22]			
[Leukemia Mononuclear TGLS = 4-6]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 6-7]			
* Thymus			
Note: PART OF THYMUS IS ON SLIDE 3-1.			
* Thyroid Gland		Ultimobranchial Cyst	Moderate

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Preputial Gland Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 851

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62951

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum
* Islets, Pancreatic	* Nose	* Parathyroid Gland	* Pituitary Gland
* Skin	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Pheochromocytoma Benign	
* Bone	Cranium	Osteopetrosis	Moderate
	Femur	Osteopetrosis	Moderate
	[Osteopetrosis TGLS = 8-27]		
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Mild
* Heart		Cardiomyopathy	Minimal
		Leukemia Mononuclear	
* Intestine Small, Duodenum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney	Renal Tubule	Adenoma	
		Leukemia Mononuclear	
	Renal Tubule	Nephropathy	Moderate
		Pigmentation	Mild
	[Adenoma TGLS = 9-26]		
* Liver	Bile Duct	Degeneration	Cystic, Mild
		Hyperplasia	Mild
	Kupffer Cell	Leukemia Mononuclear	
		Pigmentation	Marked
	[Leukemia Mononuclear TGLS = 3-23,4-24]		
* Lung		Alveolar/Bronchiolar Carcinoma	
		Leukemia Mononuclear	
	[Alveolar/Bronchiolar Carcinoma TGLS = 6-25]		
Lymph Node	Pancreatic	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 851

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62951

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 10-7-3]

* Lymph Node, Mandibular

Leukemia Mononuclear

* Lymph Node, Mesenteric

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-22]

* Mammary Gland

Hyperplasia

Moderate

* Pancreas

Leukemia Mononuclear

* Preputial Gland

Inflammation

Chronic, Mild

* Prostate

Epithelium

Leukemia Mononuclear

Hyperplasia

Mild

Inflammation

Suppurative, Mild

Leukemia Mononuclear

* Salivary Glands

Atrophy

Mild

* Seminal Vesicle

Leukemia Mononuclear

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 1-21]

* Stomach, Forestomach

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 11-4,11-4-1]

* Stomach, Glandular

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 11-4,11-4-1]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 7-7]

* Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 852

TRT#: 3

SEX: Male

DAY ON TEST: 641

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61016

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Cecum		Edema	Mild
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-6-1,7-6]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 10-3-1]		
	[Leukemia Mononuclear TGLS = 4-7-3]		
	[Pigmentation TGLS = 10-3-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 2-8]		
* Pituitary Gland	Pars Distalis	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 852

TRT#: 3

SEX: Male

DAY ON TEST: 641

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61016

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 11-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 5-6]

* Testes

Bilateral, Interstit Cell

Adenoma

[Adenoma TGLS = 3-7]

* Thyroid Gland

C Cell

Carcinoma

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma;Thyroid Gland C Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 853

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63054

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Adenoma	
[Adenoma TGLS = 4-22]			
* Kidney		Nephropathy	Moderate
	Renal Tubule	Pigmentation	Mild
[Nephropathy TGLS = 3-5]			
[Pigmentation TGLS = 1-21]			
* Liver		Clear Cell Focus	Marked
[Clear Cell Focus TGLS = 7-23]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
* Pituitary Gland		Adenoma	
[Adenoma TGLS = 5-1]	Pars Distalis		
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Moderate
[Inflammation TGLS = 2-7-2]			
* Spleen		Pigmentation	Hemosiderin, Mild
* Testes		Adenoma	
[Adenoma TGLS = 6-7]	Bilateral, Interstit Cell		

PRIMARY CAUSE OF DEATH

-

Animal Note: SPLEEN ON SLIDE 6-1 APPEARS TO BE FROM A DIFFERENT ANIMAL.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 854

TRT#: 3

SEX: Male

DAY ON TEST: 696

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
	[Leukemia Mononuclear TGLS = 3-6]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pancreas		Atrophy	Mild
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
	[Fibrosis TGLS = 5-21]		
	[Leukemia Mononuclear TGLS = 2-6]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[Adenoma TGLS = 1-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 855

TRT#: 3

SEX: Male

DAY ON TEST: 755

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Blood Vessel		Hypertrophy Inflammation	Mild Subacute, Mild
Note: BLOOD VESSEL LESIONS ARE ON SLIDE 7.			
* Bone		Hyperostosis	Moderate
[Hyperostosis TGLS = 3-21]			
* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Moderate
* Nose	Mucosa	Hyperplasia Inflammation	Minimal Suppurative, Minimal
Oral Mucosa			
* Spleen		Carcinoma Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7,2-7]			
* Thyroid Gland	C Cell Follicle	Adenoma Cyst	Moderate

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 856

TRT#: 3

SEX: Male

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63055

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	Mesentery	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Moderate
* Heart		Thrombosis	Moderate
[Thrombosis TGLS = 7-5-1]			
* Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-5]			
* Liver		Basophilic Focus	Minimal
[Basophilic Focus TGLS = 6-23]		Mixed Cell Focus	Mild
[Mixed Cell Focus TGLS = 6-23]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Spleen		Fibrosis	Mild
[Fibrosis TGLS = 1-21]		Hematopoietic Cell Proliferation	Mild
* Stomach, Forestomach		Ulcer	Marked
[Ulcer TGLS = 8-24]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

-

Animal Note: TISSUE ON SLIDE 22 APPEARS TO BE NORMAL MESENTERIC FAT; NO LESION OBSERVED.

Animal Note: COLON IS ON SLIDE 3.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 857

TRT#: 3

SEX: Male

DAY ON TEST: 630

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 91-60168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Mammary Gland

OBSERVATIONS

* Epididymis		Atypia Cellular	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 8-21]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Moderate
Mesentery	Fat	Necrosis	Marked
[Necrosis TGLS = 9-22]			
* Nose		Squamous Cell Carcinoma	
* Pituitary Gland	Pars Distalis	Hypertrophy	Mild
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate	Epithelium	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 2-7]			

PRIMARY CAUSE OF DEATH

- Nose Squamous Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 857

TRT#: 3

SEX: Male

DAY ON TEST: 630

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 91-60168

ORGAN AND ACCOUNTABLE SITE STATUS

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 858

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63056

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|--------------------------|-----------------------------|--------------------------|
| * Blood Vessel | * Bone | * Brain | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Lymph Node, Mandibular | * Nose | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--|-----------|----------------------------|----------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Epididymis | | Atypia Cellular | Moderate |
| Eye | | Cataract | Moderate |
| | Retina | Degeneration | Moderate |
| | | Hemorrhage | Moderate |
| [Cataract TGLS = 1-21] | | | |
| * Heart | | Cardiomyopathy | Mild |
| | | Leukemia Mononuclear | |
| * Intestine Large, Rectum | | Parasite Metazoan | |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Moderate |
| * Liver | | Angiectasis | Moderate |
| | | Degeneration | Cystic, Marked |
| | Bile Duct | Hepatodiaphragmatic Nodule | |
| | | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| | | Necrosis | Focal, Minimal |
| [Degeneration TGLS = 9-24] | | | |
| [Hepatodiaphragmatic Nodule TGLS = 7-23,10-25] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 858

TRT#: 3

SEX: Male

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63056

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Mild
[Leukemia Mononuclear TGLS = 12-2]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 11-5]			
* Mammary Gland		Dilatation	Mild
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 13-1]			
* Preputial Gland		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[Fibrosis TGLS = 4-22]			
[Leukemia Mononuclear TGLS = 5-6]			
* Testes	Interstit Cell	Adenoma Atrophy	Moderate
[Adenoma TGLS = 3-7]			
[Atrophy TGLS = 2-7]			
* Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 859

TRT#: 3

SEX: Male

DAY ON TEST: 910

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63057

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Epididymis
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Pancreas	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Trachea

MISSING

* Pituitary Gland

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney	Transit Epithe	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Nephropathy	Marked
	[Nephropathy TGLS = 3-5]		
* Liver		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-6]		
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 9-3-1]		
	[Leukemia Mononuclear TGLS = 7-23]		
	[Leukemia Mononuclear TGLS = 8-24]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-22]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 859

TRT#: 3

SEX: Male

DAY ON TEST: 910

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63057

ORGAN AND ACCOUNTABLE SITE STATUS

* Mammary Gland		Dilatation	Moderate
* Nose	Goblet Cell	Hyperplasia	Mild
* Parathyroid Gland		Hyperplasia	Moderate
[Hyperplasia TGLS = 10-3]			
* Prostate		Inflammation	Suppurative, Moderate
		Leukemia Mononuclear	
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[Fibrosis TGLS = 2-21]		Pigmentation	Hemosiderin, Moderate
* Stomach, Glandular		Mineralization	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[Adenoma TGLS = 1-7]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Carcinoma	
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 860

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Mammary Gland	* Nose
* Pancreas	* Pituitary Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Epididymis		Atypia Cellular	Moderate
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Preputial Gland		Inflammation	Chronic, Mild
* Prostate	Epithelium	Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 2-6]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[Adenoma TGLS = 1-7]	

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 861

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53135

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Nose	Goblet Cell	Hyperplasia	Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 862

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53136

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Nose	Goblet Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 863

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53137

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Spleen	Pigmentation	Hemosiderin, Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 864

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53138

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Epididymis

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Kidney

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Preputial Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thyroid Gland

* Trachea

* Urinary Bladder

INSUFFICIENT TISSUE

* Thymus

OBSERVATIONS

* Nose

Goblet Cell

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 865

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Testes
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Pituitary Gland	Pars Distalis	Cyst	
* Spleen		Pigmentation	Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 866

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53140

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Nose	Goblet Cell	Hyperplasia	Minimal
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PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 867

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53141

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Heart	Cardiomyopathy	Minimal
---------	----------------	---------

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 868

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53142

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Epididymis

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Kidney

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Preputial Gland

* Prostate

* Salivary Glands

* Seminal Vesicle

* Skin

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

OBSERVATIONS

* Nose

Globet Cell

Hyperplasia

Minimal

* Spleen

Pigmentation

Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 869

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53143

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Liver	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 870

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53144

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Epididymis

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Kidney

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Pancreas

* Pituitary Gland

* Preputial Gland

* Salivary Glands

* Seminal Vesicle

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Testes

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

MISSING

* Parathyroid Gland

OBSERVATIONS

* Nose

Goblet Cell

Hyperplasia

Minimal

* Prostate

Inflammation

Suppurative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 871

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63028

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Hypertrophy	Focal, Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	Moderate
		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	[Hepatodiaphragmatic Nodule TGLS = 5-23]		
* Lung		Infiltration Cellular	Histiocyte, Mild
Lymph Node	Pancreatic	Ectasia	Moderate
	Pancreatic	Leukemia Mononuclear	
	[Ectasia TGLS = 4-22]		
	[Leukemia Mononuclear TGLS = 4-22]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	
	[Dilatation TGLS = 2-8]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 871

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63028

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibroadenoma TGLS = 1-21]

* Pancreas

Atrophy

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLS = 7-1-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 872

TRT#: 2

SEX: Female

DAY ON TEST: 710

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Clitoral Gland	Vagina
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OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-10]			
* Bone Marrow		Leukemia Mononuclear	
* Kidney	Renal Tubule	Cytoplasmic Alteration	Moderate
		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Hepatocellular Adenoma	
[Hepatocellular Adenoma TGLS = 11-22]		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 10-6,11-22]			
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 13-3-1]			
[Leukemia Mononuclear TGLS = 8-23]			
[Leukemia Mononuclear TGLS = 7-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 872

TRT#: 2

SEX: Female

DAY ON TEST: 710

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61418

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 12-5]

* Mammary Gland

Dilatation

Mild

Fibroadenoma

[Dilatation TGLS = 1-8-2]

[Fibroadenoma TGLS = 15-25]

* Nose

Mucosa

Hyperplasia

Mild

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6,4-21]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Liver Hepatocellular Adenoma; Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 873

TRT#: 2

SEX: Female

DAY ON TEST: 828

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-10]		
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
	[Leukemia Mononuclear TGLS = 7-6]		
	[Vacuolization Cytoplasmic TGLS = 7-6]		
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 11-2]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Pancreatic	Pigmentation	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 873

TRT#: 2

SEX: Female

DAY ON TEST: 828

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62164

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 13-3-1]

[Leukemia Mononuclear TGLS = 5-7]

[Pigmentation TGLS = 13-3-1]

[Pigmentation TGLS = 5-7]

* Lymph Node, Mandibular

Leukemia Mononuclear

* Mammary Gland

Dilatation

Moderate

Mesentery

Fat

Necrosis

Moderate

[Necrosis TGLS = 9-22]

* Ovary

Angiectasis

Moderate

Note: EXTENSIVE LYMPHOHISTIOCYTIC INFILTRATE IN OVARY; NOT CODED ON TDMS.

[Angiectasis TGLS = 3-7]

* Pituitary Gland

Pars Distalis

Adenoma

Pars Intermed

Cyst

Moderate

[Adenoma TGLS = 12-1]

* Spleen

Leukemia Mononuclear

Necrosis

Moderate

[Leukemia Mononuclear TGLS = 1-6]

[Necrosis TGLS = 2-21]

* Stomach, Forestomach

Epithelium

Hyperplasia

Mild

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 874

TRT#: 2

SEX: Female

DAY ON TEST: 872

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63029

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Heart		Cardiomyopathy	Moderate
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Mixed Cell Focus	Marked
[Basophilic Focus TGLS = 2-6]			
[Mixed Cell Focus TGLS = 2-6]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 3-1]			
* Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 875

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62968

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Blood Vessel | * Bone | * Brain | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Nose |
| * Ovary | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

- | | | | |
|--------------------------|--------------|---------------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Focal, Marked |
| | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Clitoral Gland | | Hyperplasia | Mild |
| * Heart | | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Mineralization | Moderate |
| | | Nephropathy | Minimal |
| | Renal Tubule | Pigmentation | Moderate |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| | | [Leukemia Mononuclear TGLS = 5-6] | |
| * Lung | | Inflammation | Subacute, Minimal |
| Lymph Node | Mediastinal | Leukemia Mononuclear | |
| | Pancreatic | Leukemia Mononuclear | |
| | Pancreatic | Pigmentation | Moderate |
| | | [Leukemia Mononuclear TGLS = 7-3-1] | |
| | | [Leukemia Mononuclear TGLS = 4-23] | |
| | | [Pigmentation TGLS = 4-23] | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| | | [Leukemia Mononuclear TGLS = 1-8] | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 875

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62968

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 6-24]

* Mammary Gland

Fibroadenoma

[Fibroadenoma TGLS = 2-21]

* Pancreas

Leukemia Mononuclear

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-22]

* Thymus

Leukemia Mononuclear

* Thyroid Gland

C Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 876

TRT#: 2

SEX: Female

DAY ON TEST: 823

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62165

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

Vagina

OBSERVATIONS

* Kidney	Mineralization	Mild
	Nephropathy	Minimal
* Liver	Clear Cell Focus	Mild
	Eosinophilic Focus	Moderate
[Clear Cell Focus TGLS = 6-23]		
[Eosinophilic Focus TGLS = 5-6,7-24]		
* Mammary Gland	Fibroadenoma	Multiple
[Fibroadenoma TGLS = 1-21,2-22]		
* Spleen	Hematopoietic Cell Proliferation	Mild
* Uterus	Polyp Stromal	
[Polyp Stromal TGLS = 3-7-1]		

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 877

TRT#: 2

SEX: Female

DAY ON TEST: 562

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-59833

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Kidney	Renal Tubule	Cytoplasmic Alteration	Mild
		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-6]		
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Minimal
	[Dilatation TGLS = 1-8]		
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-6]		
* Uterus		Polyp Stromal	
	[Polyp Stromal TGLS = 2-7-1]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 878

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62943

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Intestine Small, Duodenum

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	Multiple
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Moderate
[Atrophy TGLS = 10-1-1]			
* Clitoral Gland		Hyperplasia	Mild
		Inflammation	Chronic, Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	Minimal
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
[Leukemia Mononuclear TGLS = 5-23]			
* Lung		Leukemia Mononuclear	
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Mild
	Renal	Pigmentation	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 878

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62943

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 8-24]

[Leukemia Mononuclear TGLS = 7-3-1]

[Leukemia Mononuclear TGLS = 9-25]

[Pigmentation TGLS = 7-3-1]

[Pigmentation TGLS = 9-25]

* Lymph Node, Mesenteric

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 6-5]

* Mammary Gland

Dilatation

Mild

Fibroadenoma

Note: FIBROADENOMA ALSO ON SLIDE 8 ADJACENT TO THE CLITORAL GLAND.

[Dilatation TGLS = 3-8]

[Fibroadenoma TGLS = 1-21]

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLS = 11-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-22]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 879

TRT#: 2

SEX: Female

DAY ON TEST: 638

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Esophagus	Vagina
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OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Mineralization	Mild
* Liver		Basophilic Focus	Mild
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	[Leukemia Mononuclear TGLS = 5-6]		
* Lung		Edema	Mild
		Infiltration Cellular	Histiocyte, Moderate
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-5]		
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 1-8]		
* Nose	Goblet Cell	Hyperplasia	Minimal
	Mucosa	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLS = 6-1]		
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 879

TRT#: 2

SEX: Female

DAY ON TEST: 638

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 91-60162

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 880

TRT#: 2

SEX: Female

DAY ON TEST: 688

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61138

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Brain		Atrophy	Moderate
[Atrophy TGLS = 8-1-1]			
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Minimal
		Inflammation	Granulomatous, Minimal
		Mixed Cell Focus	Moderate
Note: BASOPHILIC FOCI ALSO ON SLIDE 6.			
[Basophilic Focus TGLS = 5-23]			
[Mixed Cell Focus TGLS = 6-24]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 2-8]			
[Fibroadenoma TGLS = 1-21]			
Mesentery		Accessory Spleen	
[Accessory Spleen TGLS = 4-22]			
* Nose	Globet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-1]			
* Spleen		Pigmentation	Hemosiderin, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 880

TRT#: 2

SEX: Female

DAY ON TEST: 688

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61138

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Polyp Stromal

[Polyp Stromal TGLS = 3-7]

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma;Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 881

TRT#: 2

SEX: Female

DAY ON TEST: 870

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62529

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Moderate
* Bone	Cranium	Osteopetrosis	Moderate
[Osteopetrosis TGLS = 11-23]			
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Moderate
[Atrophy TGLS = 9-1-1]			
* Intestine Large, Cecum		Parasite Metazoan	
* Kidney		Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Clear Cell Focus	Moderate
		Leukemia Mononuclear	
	Hepatocyte	Vacuolization Cytoplasmic	Minimal
[Clear Cell Focus TGLS = 6-22]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-5]			
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 2-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 881	TRT#: 2	SEX: Female	DAY ON TEST: 870
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-62529

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Intermed	Angiectasis	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
[Hyperplasia TGLS = 10-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]			
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 882

TRT#: 2

SEX: Female

DAY ON TEST: 856

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Salivary Glands	* Skin
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Esophagus	* Parathyroid Gland	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Carcinoma	
Note: EXTENSIVE SQUAMOUS CELL DIFFERENTIATION IN CLITORAL GLAND CARCINOMA.			
[Carcinoma TGLS = 1-21]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Leukemia Mononuclear TGLS = 6-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 2-8]			
[Fibroadenoma TGLS = 3-22]			
* Ovary		Granulosa Cell Tumor Benign	
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Focal, Mild
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 882	TRT#: 2	SEX: Female	DAY ON TEST: 856
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-62376

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 8-1]			
* Spleen		Fibrosis Leukemia Mononuclear	Mild
[Fibrosis TGLS = 5-23]			
[Leukemia Mononuclear TGLS = 4-6]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Stomach, Glandular		Ulcer	Mild
[Ulcer TGLS = 9-4,9-4-1]			

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Clitoral Gland Carcinoma; Mammary Gland Fibroadenoma; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 883

TRT#: 2

SEX: Female

DAY ON TEST: 771

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 92-61575

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone Marrow	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Salivary Glands	* Skin
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
		Hyperplasia	Focal, Mild
* Bone		Fibrous Osteodystrophy	Mild
* Brain		Atrophy	Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Small, Duodenum	Epithelium	Hyperplasia	Moderate
[Hyperplasia TGLS = 7-4]			
* Kidney		Mineralization	Moderate
		Nephropathy	Marked
[Nephropathy TGLS = 4-5]			
* Liver	Hepatocyte	Mixed Cell Focus	Marked
		Vacuolization Cytoplasmic	Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	
		Hyperplasia	Moderate
[Fibroadenoma TGLS = 2-21]			
[Hyperplasia TGLS = 1-8]			
* Pancreas	Acinus	Cytoplasmic Alteration	Moderate
* Parathyroid Gland		Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 883	TRT#: 2	SEX: Female	DAY ON TEST: 771
	DOSE: UNTREATDCONTROL	DISP: Natural Death	HISTO: 92-61575

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 8-1]	Pars Distalis	Cyst	Moderate
* Spleen		Pigmentation	Hemosiderin, Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Marked
[Ulcer TGLS = 6-4]			
* Stomach, Glandular		Edema	Moderate
		Ulcer	Moderate

PRIMARY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 884

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62969

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Minimal
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Moderate
	Renal Tubule	Nephropathy	Minimal
		Pigmentation	Mild
* Liver		Basophilic Focus	Minimal
	Kupffer Cell	Pigmentation	Mild
	[Basophilic Focus TGLS = 3-6]		
* Lung		Infiltration Cellular	Histiocyte, Mild
	[Infiltration Cellular TGLS = 4-2-1]		
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
	[Fibroadenoma TGLS = 1-21]		
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	Moderate
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Hemosiderin, Moderate
* Uterus		Polyp Stromal	
	[Polyp Stromal TGLS = 2-7-1]		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 885

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63030

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Mild
* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
	Schwann Cell	Hyperplasia	Marked
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	Moderate
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Focal, Mild
	Kupffer Cell	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 2-6]		
* Lung		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Ectasia	Mild
		Leukemia Mononuclear	
		Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
* Nose	Mucosa	Hyperplasia	Mild
		Inflammation	Suppurative, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 885	TRT#: 2	SEX: Female	DAY ON TEST: 911
	DOSE: UNTREATDCONTROL	DISP: Terminal Sacrifice	HISTO: 92-63030

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen	Mucosa	Metaplasia Leukemia Mononuclear Pigmentation	Squamous, Moderate Hemosiderin, Mild
[Leukemia Mononuclear TGLS = 1-6]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 886

TRT#: 2

SEX: Female

DAY ON TEST: 788

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61680

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Parathyroid Gland

OBSERVATIONS

* Bone Marrow		Hyperplasia	Moderate
* Clitoral Gland		Carcinoma	
[Carcinoma TGLS = 2-21]			
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Leukemia Mononuclear	
Lymph Node	Iliac	Ectasia	Moderate
[Ectasia TGLS = 5-23]			
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			

PRIMARY CAUSE OF DEATH

- Clitoral Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 887

TRT#: 2

SEX: Female

DAY ON TEST: 820

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62166

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Mild
* Liver		Basophilic Focus	Mild
		Inflammation	Granulomatous, Moderate
		Leukemia Mononuclear	
		Mixed Cell Focus	Marked
[Leukemia Mononuclear TGLS = 7-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	Multiple
[Dilatation TGLS = 3-8]			
[Fibroadenoma TGLS = 1-21,2-22]			
* Ovary		Granulosa Cell Tumor Malignant	
[Granulosa Cell Tumor Malignant TGLS = 4-23]			
* Pituitary Gland	Pars Distalis	Adenoma	
Note: MULTIPLE ADENOMAS ARE PRESENT IN THE PARS DISTALIS.			
[Adenoma TGLS = 8-1,9-1]			
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Moderate
[Leukemia Mononuclear TGLS = 6-6]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 887

TRT#: 2

SEX: Female

DAY ON TEST: 820

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62166

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Hydrometra

Mild

[Hydrometra TGLS = 5-7]

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH

- Liver Leukemia Mononuclear;Ovary Granulosa Cell Tumor Malignant;Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 888

TRT#: 2

SEX: Female

DAY ON TEST: 828

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62167

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Stomach, Forestomach	* Stomach, Glandular
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OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Thrombosis	Moderate
[Thrombosis TGLS = 5-5]			
* Kidney		Mineralization	Moderate
* Liver		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 3-6]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Marked
[Leukemia Mononuclear TGLS = 6-3-1]			
[Pigmentation TGLS = 6-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Hyperplasia	Mild
* Ovary		Angiectasis	Mild
[Angiectasis TGLS = 4-7]			
* Pancreas		Atrophy	Minimal
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 888

TRT#: 2

SEX: Female

DAY ON TEST: 828

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62167

ORGAN AND ACCOUNTABLE SITE STATUS

Pigmentation

Hemosiderin, Moderate

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 889

TRT#: 2

SEX: Female

DAY ON TEST: 711

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Parathyroid Gland

OBSERVATIONS

* Brain		Atrophy	Marked
		Hydrocephalus	Mild
[Atrophy TGLS = 4-1-1]			
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	Minimal
* Lung		Alveolar/Bronchiolar Carcinoma	
[Alveolar/Bronchiolar Carcinoma TGLS = 3-2-1]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 2-21]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			
* Spleen		Pigmentation	Hemosiderin, Mild
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 889

TRT#: 2

SEX: Female

DAY ON TEST: 711

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61419

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH

- Lung Alveolar/Bronchiolar Carcinoma; Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 890

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63031

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Kidney		Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
[Basophilic Focus TGLS = 4-6]			
* Lymph Node, Mandibular		Hemorrhage	Mild
		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
[Hemorrhage TGLS = 2-8]			
[Pigmentation TGLS = 2-8]			
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Moderate
Vagina		Squamous Cell Papilloma	
[Squamous Cell Papilloma TGLS = 3-7-1]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 891

TRT#: 2

SEX: Female

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mandibular	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
Spinal Cord	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Adrenal Medulla

OBSERVATIONS

* Adrenal Cortex		Degeneration Hemorrhage	Fatty, Marked Moderate
[Degeneration TGLS = 5-10]			
* Brain		Atrophy	Moderate
[Atrophy TGLS = 6-1-1]			
* Clitoral Gland		Hyperplasia Inflammation	Moderate Chronic, Moderate
Note: CLITORAL GLAND LESIONS PRESENT ON SLIDE 21.			
* Kidney		Mineralization Nephropathy	Moderate Moderate
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Hemorrhage	Moderate
* Mammary Gland		Galactoceles	Marked
[Galactoceles TGLS = 1-8,2-21,3-22,8-24]			
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 4-23]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-1]			
* Spleen		Hematopoietic Cell Proliferation	Mild
* Thyroid Gland		Ultimobranchial Cyst	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 891

TRT#: 2

SEX: Female

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62168

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 892

TRT#: 2

SEX: Female

DAY ON TEST: 856

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Ovary
* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	Multiple
[Dilatation TGLS = 4-8]			
[Fibroadenoma TGLS = 1-21,3-23]			
* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 6-1-1]			
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLS = 2-22]			
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild
[Fibrosis TGLS = 5-24]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 892

TRT#: 2

SEX: Female

DAY ON TEST: 856

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62377

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma;Pituitary Gland Pars Distalis Adenoma;Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 893

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62944

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone Marrow	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Moderate
		Hyperplasia	Focal, Marked
* Bone	Cranium	Osteopetrosis	Moderate
	Femur	Osteopetrosis	Moderate
[Osteopetrosis TGLS = 9-25]			
* Brain		Atrophy	Moderate
[Atrophy TGLS = 10-1-1]			
* Clitoral Gland		Inflammation	Suppurative, Mild
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	Moderate
		Hematopoietic Cell Proliferation	Minimal
Lymph Node	Mediastinal	Pigmentation	Moderate
[Pigmentation TGLS = 8-3-1]			
* Lymph Node, Mandibular		Ectasia	Mild
		Hemorrhage	Minimal
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	
[Dilatation TGLS = 1-21,5-23]			
[Fibroadenoma TGLS = 2-22]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 11-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 893

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62944

ORGAN AND ACCOUNTABLE SITE STATUS

* Skin [Edema TGLS = 3-8]	Subcut Tiss	Edema	Moderate
* Spleen		Fibrosis	Mild
		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 894

TRT#: 2

SEX: Female

DAY ON TEST: 822

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62169

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration Leukemia Mononuclear	Fatty, Mild
[Leukemia Mononuclear TGLS = 6-10]			
* Bone Marrow		Leukemia Mononuclear	
* Brain		Hemorrhage	Moderate
[Hemorrhage TGLS = 9-1-1]			
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear Mineralization	Mild
* Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-5]			
* Mammary Gland		Dilatation Fibroadenoma	Mild
[Fibroadenoma TGLS = 1-21]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 10-1-1]			
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 894

TRT#: 2

SEX: Female

DAY ON TEST: 822

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62169

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 4-6]

* Stomach, Glandular

Erosion

Moderate

[Erosion TGLS = 11-4]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 895

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63032

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
Spinal Cord	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

Ear		Inflammation	Chronic, Marked
Note: INFLAMMATION INVOLVES MIDDLE EAR.			
* Heart		Cardiomyopathy	Moderate
* Kidney		Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
[Basophilic Focus TGLS = 1-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hemorrhage	Moderate
* Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 896

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62970

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Marked
[Atrophy TGLS = 7-1-1]			
* Clitoral Gland		Adenoma	
		Cyst	Moderate
[Adenoma TGLS = 2-22]			
[Cyst TGLS = 2-22]			
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver		Basophilic Focus	Mild
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 4-24]			
* Lymph Node, Mandibular		Pigmentation	Moderate
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-5]			
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 896

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62970

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland

Pars Distalis

Adenoma

[Adenoma TGLS = 8-1-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-23]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 897

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63033

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Marked
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
* Lung		Infiltration Cellular	Histiocyte, Mild
[Infiltration Cellular TGLS = 3-22]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
Mesentery	Fat	Necrosis	Moderate
[Necrosis TGLS = 2-21]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Focal, Moderate
* Spleen		Pigmentation	Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 898

TRT#: 2

SEX: Female

DAY ON TEST: 827

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 92-62170

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Adrenal Medulla

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Focal, Mild
		Hypertrophy	Focal, Moderate
		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Moderate
* Liver		Hepatodiaphragmatic Nodule	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[Hepatodiaphragmatic Nodule TGLS = 5-23]		
	[Leukemia Mononuclear TGLS = 6-6]		
* Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
	[Infiltration Cellular TGLS = 8-2-1]		
	[Leukemia Mononuclear TGLS = 7-2]		
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	Note: AREA OF RECENT HEMORRHAGE IN SPLEEN (TGL 2-21); NOT CODED ON TDMS.		
	[Leukemia Mononuclear TGLS = 3-6,4-22]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 898

TRT#: 2

SEX: Female

DAY ON TEST: 827

DOSE: UNTREATDCONTROL

DISP: Natural Death

HISTO: 92-62170

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 899

TRT#: 2

SEX: Female

DAY ON TEST: 575

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60063

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Colon
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Medulla		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Mild
* Intestine Large, Cecum		Edema	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney	Renal Tubule	Dilatation	Mild
		Glomerulosclerosis	Marked
		Mineralization	Marked
		Nephropathy	Mild
		[Dilatation TGLS = 1-5]	
		[Glomerulosclerosis TGLS = 1-5]	
		[Nephropathy TGLS = 1-5]	
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
		Pigmentation	Mild
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Moderate
* Mammary Gland		Dilatation	Moderate
* Pancreas			
Note: MODERATE EDEMA IN PANCREAS; MORPHOLOGY NOT AVAILABLE.			
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 899

TRT#: 2

SEX: Female

DAY ON TEST: 575

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60063

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Kidney Glomerulosclerosis

CONTRIBUTORY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 900

TRT#: 2

SEX: Female

DAY ON TEST: 837

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62171

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Nose	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Mesenteric	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
		Degeneration	Fatty, Mild
* Brain		Atrophy	Moderate
[Atrophy TGLS = 9-1-1]			
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	Mild
[Basophilic Focus TGLS = 7-6]			
* Lung		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 2-21]			
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 5-22]			
* Ovary		Granulosa Cell Tumor Benign	
Note: OVARIAN TUMOR INCLUDES SURROUNDING BLOOD-FILLED CYST; NOT CODED ON TDMS.			
[Granulosa Cell Tumor Benign TGLS = 6-7]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 900

TRT#: 2

SEX: Female

DAY ON TEST: 837

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62171

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 10-1-1]			
* Spleen		Hematopoietic Cell Proliferation Pigmentation	Mild Hemosiderin, Mild

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Ovary Granulosa Cell Tumor Benign; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 901

TRT#: 2

SEX: Female

DAY ON TEST: 641

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61019

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex [Leukemia Mononuclear TGLS = 6-10]		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
* Kidney		Leukemia Mononuclear Mineralization	Moderate
* Liver [Leukemia Mononuclear TGLS = 12-6]		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-21]			
[Leukemia Mononuclear TGLS = 10-3-1]			
[Leukemia Mononuclear TGLS = 4-22]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric [Leukemia Mononuclear TGLS = 7-5]		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
* Ovary		Cyst Leukemia Mononuclear	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 901	TRT#: 2	SEX: Female	DAY ON TEST: 641
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61019

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLS = 1-7]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
[Hyperplasia TGLS = 11-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Thymus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 902

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63034

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Lung	* Nose	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Pituitary Gland	Vagina
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Liver		Basophilic Focus	Marked
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Minimal
[Basophilic Focus TGLS = 4-6]			
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
* Lymph Node, Mesenteric		Hemorrhage	Mild
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 2-7]			
* Pancreas		Atrophy	Minimal
* Spleen		Pigmentation	Hemosiderin, Minimal
* Uterus		Hydrometra	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 903

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62945

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Brain		Atrophy	Mild
[Atrophy TGLS = 4-1-1]			
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Moderate
[Basophilic Focus TGLS = 2-6]			
* Lung		Foreign Body	
		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
		Pigmentation	Mild
* Lymph Node, Mesenteric		Ectasia	Moderate
[Ectasia TGLS = 3-5]			
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	Multiple
Note: FIBROADENOMA ALSO ON SLIDE 8.			
[Fibroadenoma TGLS = 1-21]			
* Ovary			
Note: LYMPHOHISTIOCYTIC INFILTRATE IN OVARY; NOT CODED ON TDMS.			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 903

TRT#: 2

SEX: Female

DAY ON TEST: 911

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-62945

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Pigmentation

Hemosiderin, Moderate

* Thyroid Gland

Ultimobranchial Cyst

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 904

TRT#: 2

SEX: Female

DAY ON TEST: 626

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Nose	* Ovary	* Pancreas	* Salivary Glands
* Skin	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Uterus			

MISSING

* Thymus

INSUFFICIENT TISSUE

* Parathyroid Gland

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Kidney		Mineralization	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Marked
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Iliac	Leukemia Mononuclear	
	Inguinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 9-21]			
[Leukemia Mononuclear TGLS = 10-22]			
[Leukemia Mononuclear TGLS = 4-7-1]			
[Leukemia Mononuclear TGLS = 1-8,1-23]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 904

TRT#: 2

SEX: Female

DAY ON TEST: 626

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60163

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 8-5]

* Mammary Gland

Dilatation

Mild

* Pituitary Gland

Pars Intermed

Cyst

Moderate

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

* Stomach, Forestomach

Ulcer

Moderate

* Urinary Bladder

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 905

TRT#: 2

SEX: Female

DAY ON TEST: 913

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63244

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Clitoral Gland		Inflammation	Suppurative, Mild
* Kidney		Mineralization	Mild
* Liver		Eosinophilic Focus	Moderate
	[Eosinophilic Focus TGLS = 2-22]	Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
	[Fibroadenoma TGLS = 1-21]	Fibroadenoma	
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Distalis	Hyperplasia	Focal, Minimal
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 906

TRT#: 2

SEX: Female

DAY ON TEST: 862

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone Marrow	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Salivary Glands	* Skin	* Stomach, Forestomach	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Hyperplasia	Diffuse, Moderate
* Adrenal Medulla		Hyperplasia	Mild
* Bone		Fibrous Osteodystrophy	Moderate
* Brain		Atrophy	Moderate
[Atrophy TGLS = 12-1-1]			
* Heart		Mineralization	Marked
[Mineralization TGLS = 6-5]			
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Mineralization	Moderate
		Nephropathy	Marked
[Nephropathy TGLS = 4-5]			
* Lung		Infiltration Cellular	Histiocyte, Moderate
		Mineralization	Moderate
[Infiltration Cellular TGLS = 9-2]			
[Mineralization TGLS = 9-2]			
* Mammary Gland		Fibroadenoma	
		Hyperplasia	Moderate
[Fibroadenoma TGLS = 2-21]			
[Hyperplasia TGLS = 1-8-1]			
* Nose		Foreign Body	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 906

TRT#: 2

SEX: Female

DAY ON TEST: 862

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62378

ORGAN AND ACCOUNTABLE SITE STATUS

	Mucosa	Hyperplasia Inflammation Hyperplasia	Mild Suppurative, Mild Marked
* Parathyroid Gland [Hyperplasia TGLS = 8-3]			
* Pituitary Gland [Adenoma TGLS = 11-1-1]	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation Pigmentation Mineralization	Minimal Hemosiderin, Mild Marked
* Stomach, Glandular [Mineralization TGLS = 10-4]			
* Thymus [Thymoma Benign TGLS = 7-3]		Thymoma Benign	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Kidney Nephropathy;Mammary Gland Fibroadenoma;Thymus Thymoma Benign

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 907

TRT#: 2

SEX: Female

DAY ON TEST: 880

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63035

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Atrophy	Moderate
[Atrophy TGLS = 12-1-1]			
* Clitoral Gland		Inflammation	Chronic, Mild
* Heart		Cardiomyopathy	Minimal
		Thrombosis	Moderate
[Thrombosis TGLS = 9-23]			
* Kidney	Renal Tubule	Atrophy	Moderate
		Mineralization	Moderate
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
[Atrophy TGLS = 1-21]			
* Liver		Basophilic Focus	Mild
		Hematopoietic Cell Proliferation	Minimal
		Leukemia Mononuclear	
		Mixed Cell Focus	Moderate
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 2-6]			
[Mixed Cell Focus TGLS = 3-22]			
* Lung	Alveolar Epith	Alveolar/Bronchiolar Adenoma	
		Hyperplasia	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 907	TRT#: 2	SEX: Female	DAY ON TEST: 880
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-63035

ORGAN AND ACCOUNTABLE SITE STATUS

[Alveolar/Bronchiolar Adenoma TGLS = 8-2-2] [Hyperplasia TGLS = 7-2-1] Lymph Node	Mediastinal Mediastinal	Infiltration Cellular Leukemia Mononuclear Pigmentation	Histiocyte, Mild Moderate
[Leukemia Mononuclear TGLS = 5-3-1] * Mammary Gland [Dilatation TGLS = 10-8]		Dilatation	Mild
* Nose * Pituitary Gland [Adenoma TGLS = 11-1-1]	Goblet Cell Pars Distalis	Hyperplasia Adenoma	Minimal
* Spleen		Fibrosis Pigmentation	Mild Hemosiderin, Moderate

PRIMARY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Liver Leukemia Mononuclear;Lung Alveolar/Bronchiolar Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 908

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63036

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
		Hypertrophy	Focal, Moderate
* Brain		Atrophy	Marked
[Atrophy TGLS = 5-1-1]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Cytoplasmic Alteration	Moderate
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
* Lung		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	Multiple
[Dilatation TGLS = 7-8]			
[Fibroadenoma TGLS = 2-22,3-23]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 6-1-1]			
* Skin	Epidermis	Hyperplasia	Mild
		Ulcer	Minimal
[Hyperplasia TGLS = 1-21]			
[Ulcer TGLS = 1-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 908

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63036

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Pigmentation

Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 909

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
[Leukemia Mononuclear TGLS = 15-5]		Leukemia Mononuclear	
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Mineralization	Mild
	Renal Tubule	Pigmentation	Moderate
* Liver		Eosinophilic Focus	Mild
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 9-6]			
* Lung		Leukemia Mononuclear	
Note: THE LEUKEMIA INCLUDES SEVERAL AREAS OF ALVEOLAR CELL HYPERPLASIA; NOT CODED ON TDMS.			
[Leukemia Mononuclear TGLS = 14-2]			
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 909

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61420

ORGAN AND ACCOUNTABLE SITE STATUS

	Renal	Leukemia Mononuclear Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 12-24]		
	[Leukemia Mononuclear TGLS = 11-23]		
	[Leukemia Mononuclear TGLS = 5-21]		
	[Leukemia Mononuclear TGLS = 13-3]		
	[Pigmentation TGLS = 12-24]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 3-8]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 10-22]		
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 2-8]		
* Nose		Inflammation	Suppurative, Minimal
* Pancreas		Atrophy	Moderate
		Leukemia Mononuclear	
		[Atrophy TGLS = 7-7]	
* Pituitary Gland	Pars Distalis	Adenoma	
		[Adenoma TGLS = 16-1]	
* Spleen		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 6-6]	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 910

TRT#: 2

SEX: Female

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61681

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone Marrow	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone	Cranium	Osteopetrosis	Mild
[Osteopetrosis TGLS = 7-24]			
* Clitoral Gland		Hyperplasia	Mild
* Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Dilatation	Mild
		Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	Multiple
[Dilatation TGLS = 3-23,4-8]			
[Fibroadenoma TGLS = 1-21,2-22]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 910

TRT#: 2

SEX: Female

DAY ON TEST: 786

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61681

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Leukemia Mononuclear
* Pituitary Gland [Leukemia Mononuclear TGLS = 8-1]	Leukemia Mononuclear
* Spleen	Leukemia Mononuclear

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 911

TRT#: 2

SEX: Female

DAY ON TEST: 866

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Hyperplasia Leukemia Mononuclear	Focal, Moderate
[Leukemia Mononuclear TGLS = 10-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Leukemia Mononuclear Mineralization	Mild
* Liver		Leukemia Mononuclear	
Note: LEUKEMIA MONUC LESION IN LIVER INCLUDES EXTENSIVE HEMORRHAGE; NOT CODED ON TDMS.			
[Leukemia Mononuclear TGLS = 9-6]			
* Lung		Hemorrhage Hyperplasia Infiltration Cellular Leukemia Mononuclear	Mild Moderate Histiocyte, Mild
[Hemorrhage TGLS = 14-2]			
[Leukemia Mononuclear TGLS = 14-2]			
Lymph Node	Mediastinal Pancreatic	Leukemia Mononuclear Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 911

TRT#: 2

SEX: Female

DAY ON TEST: 866

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62530

ORGAN AND ACCOUNTABLE SITE STATUS

	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 13-3-1]		
	[Leukemia Mononuclear TGLS = 11-22]		
	[Leukemia Mononuclear TGLS = 8-7]		
	[Pigmentation TGLS = 11-22]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 1-8]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
	[Dilatation TGLS = 2-8]		
	[Fibroadenoma TGLS = 3-21]		
* Ovary		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Intermed	Cyst	Moderate
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 7-6]		
* Uterus		Hyperplasia	Cystic, Mild
		Leukemia Mononuclear	
		Polyp Stromal	
	[Leukemia Mononuclear TGLS = 5-7-1]		
	[Polyp Stromal TGLS = 4-7]		

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma;Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 912

TRT#: 2

SEX: Female

DAY ON TEST: 698

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-10]			
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Cyst	Moderate
		Hyperplasia	Mild
[Cyst TGLS = 1-8]			
[Hyperplasia TGLS = 1-8]			
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 7-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 10-22]			
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 11-23]			
* Lymph Node, Mandibular		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 912	TRT#: 2	SEX: Female	DAY ON TEST: 698
	DOSE: UNTREATDCONTROL	DISP: Moribund Sacrifice	HISTO: 92-61421

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
Mesentery		Accessory Spleen	
[Accessory Spleen TGLS = 5-21]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 2-7]			
* Pancreas		Atrophy	Minimal
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Moderate
		Leukemia Mononuclear	
[Hyperplasia TGLS = 12-1]			
[Leukemia Mononuclear TGLS = 12-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 913

TRT#: 2

SEX: Female

DAY ON TEST: 837

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62172

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Clitoral Gland		Cyst	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Inflammation	Granulomatous, Mild
		Mixed Cell Focus	Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
		Pigmentation	Mild
* Mammary Gland		Dilatation	Minimal
		Fibroadenoma	Multiple

Note: FIBROUS COMPONENT PREDOMINATES IN THE FIBROADENOMA ON SLIDE 21.

[Fibroadenoma TGLS = 1-21,2-22]

* Nose	Goblet Cell	Hyperplasia	Minimal
* Ovary		Cyst	Moderate
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Angiectasis	Moderate
	Pars Intermed	Angiectasis	Moderate
	Pars Distalis	Hyperplasia	Focal, Moderate

[Angiectasis TGLS = 4-1]

[Angiectasis TGLS = 4-1]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:02
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 913

TRT#: 2

SEX: Female

DAY ON TEST: 837

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62172

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLS = 4-1]

* Spleen

Hematopoietic Cell Proliferation

Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 914

TRT#: 2

SEX: Female

DAY ON TEST: 725

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Mild
[Leukemia Mononuclear TGLS = 3-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Renal Tubule	Mineralization	Moderate
	Renal Tubule	Necrosis	Marked
[Necrosis TGLS = 4-21]		Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
[Leukemia Mononuclear TGLS = 5-6]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 1-8]			
* Nose	Globet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Cyst	Moderate
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 914

TRT#: 2

SEX: Female

DAY ON TEST: 725

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61422

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-6]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 915

TRT#: 2

SEX: Female

DAY ON TEST: 913

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63037

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Blood Vessel | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

OBSERVATIONS

- | | | | |
|-------------------------------------|---------------|-------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Blood Vessel | | | |
| Note: THE AORTA IS ON SLIDE 5. | | | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Moderate |
| | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | Mild |
| | Bile Duct | Hyperplasia | Moderate |
| | | Leukemia Mononuclear | |
| | | Mixed Cell Focus | Mild |
| [Basophilic Focus TGLS = 4-6] | | | |
| [Leukemia Mononuclear TGLS = 3-6] | | | |
| [Mixed Cell Focus TGLS = 4-6] | | | |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| | | Pigmentation | Mild |
| * Mammary Gland | | Dilatation | Mild |
| | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLS = 1-21,2-22] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLS = 5-1] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 915

TRT#: 2

SEX: Female

DAY ON TEST: 913

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63037

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 916

TRT#: 2

SEX: Female

DAY ON TEST: 870

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	Ear	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
Peripheral Nerve	* Salivary Glands	* Skin	Spinal Cord
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Brain		Atrophy	Mild
[Atrophy TGLS = 4-1-1]			
* Clitoral Gland		Adenoma	
* Kidney		Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Basophilic Focus	Moderate
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
[Basophilic Focus TGLS = 3-6]			
[Eosinophilic Focus TGLS = 3-6]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Lymph Node, Mandibular		Ectasia	Mild
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1-1]			
* Spleen		Pigmentation	Hemosiderin, Moderate
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 917

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63038

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Ovary	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	Moderate
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
	[Basophilic Focus TGLS = 2-6]		
	[Eosinophilic Focus TGLS = 2-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
* Mammary Gland		Dilatation	Mild
	[Fibroadenoma TGLS = 1-21]	Fibroadenoma	
* Pancreas		Atrophy	Mild
* Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 918

TRT#: 2

SEX: Female

DAY ON TEST: 752

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Ovary	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear Necrosis	Minimal
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Moderate
* Bone Marrow		Leukemia Mononuclear Myelofibrosis	Mild
* Heart		Cardiomyopathy	Moderate
* Intestine Small, Duodenum		Erosion	Mild
* Kidney	Renal Tubule Transit Epithe	Cytoplasmic Alteration Hyperplasia Leukemia Mononuclear Mineralization	Mild Mild Moderate
* Liver	Renal Tubule Bile Duct	Nephropathy Pigmentation Hyperplasia Leukemia Mononuclear	Minimal Mild Moderate
	Kupffer Cell	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 5-6]		
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical Mediastinal	Leukemia Mononuclear Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:02

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 918

TRT#: 2

SEX: Female

DAY ON TEST: 752

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61423

ORGAN AND ACCOUNTABLE SITE STATUS

Pancreatic Mediastinal		Leukemia Mononuclear Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 6-22]			
[Leukemia Mononuclear TGLS = 9-24]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 2-21]			
* Pancreas		Atrophy	Moderate
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Thymus		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-23]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 919

TRT#: 2

SEX: Female

DAY ON TEST: 730

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Uterus		

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Brain		Astrocytoma Malignant	
* Kidney		Mineralization	Moderate
* Liver		Inflammation	Granulomatous, Mild
[Inflammation TGLS = 2-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Hemorrhage	Moderate
[Hemorrhage TGLS = 1-8]			
* Mammary Gland		Dilatation	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 3-1]			
* Spleen		Pigmentation	Hemosiderin, Moderate
* Stomach, Forestomach		Edema	Mild
		Erosion	Mild
	Epithelium	Hyperplasia	Minimal
* Urinary Bladder	Transit Epithe	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

- Brain Astrocytoma Malignant

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 920

TRT#: 2

SEX: Female

DAY ON TEST: 913

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63039

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Inflammation	Granulomatous, Mild
		Necrosis	Focal, Mild
[Basophilic Focus TGLS = 2-6]			
[Inflammation TGLS = 2-6]			
[Necrosis TGLS = 2-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 1-8]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pancreas		Atrophy	Minimal
* Spleen		Pigmentation	Hemosiderin, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 921

TRT#: 2

SEX: Female

DAY ON TEST: 892

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63040

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Brain		Atrophy	Moderate
[Atrophy TGLS = 8-1-1]			
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Basophilic Focus	Mild
[Basophilic Focus TGLS = 6-6]		Inflammation	Subacute, Mild
* Lung		Hemorrhage	Moderate
[Hemorrhage TGLS = 7-2]		Infiltration Cellular	Histiocyte, Moderate
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Carcinoma	
[Carcinoma TGLS = 3-21]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 9-1]			
* Skin		Basal Cell Carcinoma	
[Basal Cell Carcinoma TGLS = 4-22]			
* Spleen		Pigmentation	Hemosiderin, Mild
* Stomach, Forestomach		Ulcer	Mild
* Thyroid Gland	Follicle	Cyst	Moderate

PRIMARY CAUSE OF DEATH

- Skin Basal Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 921

TRT#: 2

SEX: Female

DAY ON TEST: 892

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-63040

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Carcinoma; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 922

TRT#: 2

SEX: Female

DAY ON TEST: 780

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61682

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Clitoral Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Intestine Large, Colon

OBSERVATIONS

* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Inflammation	Granulomatous, Mild
* Brain		Atrophy	Marked
* Esophagus	Epithelium	Hyperplasia	Mild
[Hyperplasia TGLS = 1-21]			
* Kidney		Mineralization	Moderate
		Nephropathy	Mild
* Liver		Basophilic Focus	Minimal
		Mixed Cell Focus	Moderate
* Lymph Node, Mandibular		Pigmentation	Moderate
* Mammary Gland		Dilatation	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 2-1-1]			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Hemosiderin, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Moderate

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 923

TRT#: 2

SEX: Female

DAY ON TEST: 677

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lung
* Nose	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Thymus	* Trachea
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
		Hypertrophy	Focal, Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-10]			
* Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Adenoma	
* Kidney		Mineralization	Moderate
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-21]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
[Dilatation TGLS = 1-8]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 2-7]			
* Pancreas		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 923

TRT#: 2

SEX: Female

DAY ON TEST: 677

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61139

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

* Stomach, Glandular

Pigmentation

Hemosiderin, Mild

Leukemia Mononuclear

Note: FOCAL AREA IN MUSCULARIS WITH STRUCTURES RESEMBLING GLANDULAR PROLIFERATION AND PANCREATIC ACINAR METAPLASIA; NOT CODED.

* Thyroid Gland

C Cell

Adenoma

* Urinary Bladder

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 924

TRT#: 2

SEX: Female

DAY ON TEST: 793

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62173

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Ovary	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Hyperplasia Leukemia Mononuclear	Focal, Minimal
[Leukemia Mononuclear TGLS = 7-10]			
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy Leukemia Mononuclear	Moderate
* Intestine Small, Ileum		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 10-4]			
* Kidney		Leukemia Mononuclear Mineralization	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 8-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 14-3-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 924

TRT#: 2

SEX: Female

DAY ON TEST: 793

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62173

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 12-22]			
[Leukemia Mononuclear TGLS = 11-21]			
[Leukemia Mononuclear TGLS = 5-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-5]			
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Intermed	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 15-1]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
* Thymus		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 13-3]			
* Uterus		Leukemia Mononuclear	
		Polyp Stromal	
[Polyp Stromal TGLS = 4-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 925

TRT#: 2

SEX: Female

DAY ON TEST: 777

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Ovary	* Parathyroid Gland	* Thyroid Gland	* Trachea

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Focal, Minimal
	Kupffer Cell	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 8-6]		
* Lung		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 9-2]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-7]		
	[Leukemia Mononuclear TGLS = 1-3-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 7-5]		
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 2-8]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 925

TRT#: 2

SEX: Female

DAY ON TEST: 777

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61683

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas [Leukemia Mononuclear TGLS = 4-7]		Leukemia Mononuclear	
* Pituitary Gland [Leukemia Mononuclear TGLS = 11-1]	Pars Distalis	Hyperplasia Leukemia Mononuclear	Focal, Mild
* Salivary Glands		Leukemia Mononuclear	
* Skin [Trichoepithelioma TGLS = 10-21]		Trichoepithelioma	
* Spleen [Leukemia Mononuclear TGLS = 6-6]		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Thymus		Leukemia Mononuclear	
* Urinary Bladder		Leukemia Mononuclear	
* Uterus [Leukemia Mononuclear TGLS = 3-7]		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Skin Trichoepithelioma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 926

TRT#: 2

SEX: Female

DAY ON TEST: 912

DOSE: UNTREATDCONTROL

DISP: Terminal Sacrifice

HISTO: 92-63041

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Clitoral Gland		Cyst	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Moderate
		Inflammation	Granulomatous, Moderate
		Leukemia Mononuclear	
	[Eosinophilic Focus TGLS = 4-22]		
	[Inflammation TGLS = 4-22]		
* Lung		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Hemorrhage	Mild
	[Hemorrhage TGLS = 2-8]		
* Mammary Gland		Dilatation	Minimal
	[Dilatation TGLS = 1-8]		
	[Fibroadenoma TGLS = 3-21]		
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	Moderate
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 927

TRT#: 2

SEX: Female

DAY ON TEST: 504

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-59834

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
Peripheral Nerve	* Pituitary Gland	* Salivary Glands	* Skin
Spinal Cord	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-10]		
* Bone Marrow	Leukemia Mononuclear	
* Brain	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-21]		
* Heart	Leukemia Mononuclear	
* Kidney	Leukemia Mononuclear	
	Mineralization	Moderate
* Liver	Leukemia Mononuclear	
* Lung	Leukemia Mononuclear	
* Lymph Node, Mandibular	Leukemia Mononuclear	
* Lymph Node, Mesenteric	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-5]		
* Ovary	Leukemia Mononuclear	
* Spleen	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-6]		

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 928

TRT#: 2

SEX: Female

DAY ON TEST: 808

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-62174

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	Tooth	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Clitoral Gland [Cyst TGLS = 2-8]		Cyst	Moderate
* Kidney		Mineralization	Mild
* Liver		Basophilic Focus	Minimal
* Lung [Infiltration Cellular TGLS = 4-2-1]		Leukemia Mononuclear Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Moderate
* Mammary Gland [Dilatation TGLS = 1-8]		Dilatation	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
* Spleen		Leukemia Mononuclear Pigmentation	Hemosiderin, Moderate
Zymbal's Gland [Carcinoma TGLS = 5-21]		Carcinoma	

PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 929

TRT#: 2

SEX: Female

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Cytoplasmic Alteration	Moderate
	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Mineralization	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
	[Leukemia Mononuclear TGLS = 4-22,5-6]		
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 14-3-1]		
	[Leukemia Mononuclear TGLS = 11-25]		
	[Pigmentation TGLS = 14-3-1]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 929

TRT#: 2

SEX: Female

DAY ON TEST: 691

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 92-61425

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 10-5]			
* Mammary Gland		Dilatation	Mild
Mesentery		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-23,12-24]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 7-7]			
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Minimal
Skeletal Muscle		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-21,13-26]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 930

TRT#: 2

SEX: Female

DAY ON TEST: 593

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60064

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Nose
* Ovary	* Pancreas	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Parathyroid Gland	Vagina
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INSUFFICIENT TISSUE

* Adrenal Medulla

OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Moderate
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Marked
	Hepatocyte	Vacuolization Cytoplasmic	Marked
[Pigmentation TGLS = 4-21]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
[Pigmentation TGLS = 5-3-1]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate
[Cyst TGLS = 6-1]			
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 930

TRT#: 2

SEX: Female

DAY ON TEST: 593

DOSE: UNTREATDCONTROL

DISP: Moribund Sacrifice

HISTO: 91-60064

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 931

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53145

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Heart	Cardiomyopathy	Minimal
* Intestine Large, Colon	Parasite Metazoan	
* Kidney	Mineralization	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 932

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Mineralization

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 933

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53147

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Mineralization

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 934

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53148

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Parathyroid Gland

OBSERVATIONS

* Adrenal Cortex	Accessory Adrenal Cortical Nodule	
* Kidney	Mineralization	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 935

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53149

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Mammary Gland
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

- * Adrenal Medulla
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Nose
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

- * Blood Vessel
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Ovary
- * Skin
- * Thymus
- * Uterus

- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Pancreas
- * Spleen
- * Thyroid Gland

MISSING

- * Parathyroid Gland

OBSERVATIONS

- * Kidney Mineralization Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 937

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53151

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

MISSING

* Parathyroid Gland

OBSERVATIONS

* Kidney

Mineralization

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 938

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53152

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Mineralization

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 939

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53153

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

OBSERVATIONS

* Kidney

Mineralization

Moderate

* Uterus

Hydrometra

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 940

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: UNTREATDCONTROL

DISP: Scheduled Sacrifice

HISTO: 90-53154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Ovary

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Mineralization

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 941

TRT#: 4

SEX: Female

DAY ON TEST: 852

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

INSUFFICIENT TISSUE

* Thymus

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
		Atrophy	Moderate
[Atrophy TGLS = 1-10]			
* Bone	Femur	Osteopetrosis	Moderate
* Bone Marrow	Stromal Cell	Hyperplasia	Marked
* Clitoral Gland		Hyperplasia	Mild
		Inflammation	Chronic, Moderate
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
* Lymph Node, Mandibular		Hyperplasia	Plasma Cell, Moderate
		Pigmentation	Mild
* Nose	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Angiectasis	Moderate
	Pars Distalis	Cyst	Moderate
Note: PIGMENT-LADEN MACROPHAGES IN PITUITARY GLAND; NOT CODED ON TDMS.			
[Angiectasis TGLS = 4-1]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 941

TRT#: 4

SEX: Female

DAY ON TEST: 852

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62382

ORGAN AND ACCOUNTABLE SITE STATUS

[Hematopoietic Cell Proliferation TGLS = 2-6]

[Leukemia Mononuclear TGLS = 2-6]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 942

TRT#: 4

SEX: Female

DAY ON TEST: 796

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62184

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Atrophy	Moderate
[Atrophy TGLS = 5-1-1]			
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Mild
* Liver		Eosinophilic Focus	Mild
[Eosinophilic Focus TGLS = 3-23]			
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
Mesentery	Fat	Necrosis	Minimal
[Necrosis TGLS = 2-22]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Intermed	Cyst	Moderate
[Cyst TGLS = 4-1]			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 943

TRT#: 4

SEX: Female

DAY ON TEST: 841

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Hypertrophy Leukemia Mononuclear	Focal, Moderate
* Adrenal Medulla		Hyperplasia Leukemia Mononuclear	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Moderate
[Atrophy TGLS = 14-1-1]			
* Clitoral Gland		Cyst Hyperplasia	Moderate Moderate
[Cyst TGLS = 1-21]			
[Hyperplasia TGLS = 1-21]			
* Kidney	Renal Tubule Renal Tubule	Atrophy Cytoplasmic Alteration Leukemia Mononuclear Mineralization	Mild Mild Minimal
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Minimal
	Kupffer Cell	Pigmentation	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Leukemia Mononuclear TGLS = 9-6]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 943	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Moribund Sacrifice	DAY ON TEST: 841 HISTO: 92-62383
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ORGAN AND ACCOUNTABLE SITE STATUS

* Lung	Alveolar Epith	Alveolar/Bronchiolar Adenoma Hyperplasia Infiltration Cellular Leukemia Mononuclear	Mild Histiocyte, Minimal
	[Alveolar/Bronchiolar Adenoma TGLS = 10-2-1] [Hyperplasia TGLS = 11-2-2]		
Lymph Node	Iliac Pancreatic Renal Renal	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 13-24] [Leukemia Mononuclear TGLS = 12-23] [Leukemia Mononuclear TGLS = 7-7]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Galactocele	Moderate
	[Galactocele TGLS = 2-8]		
* Nose	Mucosa	Hyperplasia Inflammation	Mild Suppurative, Moderate
	Mucosa	Metaplasia	Squamous, Moderate
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	[Cyst TGLS = 15-1]		
* Spleen		Fibrosis Leukemia Mononuclear	Moderate
	[Fibrosis TGLS = 4-22] [Leukemia Mononuclear TGLS = 3-6,3-22]		
* Uterus		Polyp Stromal	
	[Polyp Stromal TGLS = 5-7-1]		

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Lung	Alveolar/Bronchiolar Adenoma;Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 944

TRT#: 4

SEX: Female

DAY ON TEST: 672

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61152

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Parathyroid Gland	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

Vagina

OBSERVATIONS

* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Clitoral Gland		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
* Liver		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Iliac	Leukemia Mononuclear	
	Inguinal	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Popliteal	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
		Leukemia Mononuclear	

[Leukemia Mononuclear TGLS = 2-22]

[Leukemia Mononuclear TGLS = 3-23,12-29]

[Leukemia Mononuclear TGLS = 7-24]

[Leukemia Mononuclear TGLS = 8-25]

[Leukemia Mononuclear TGLS = 10-27]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 944

TRT#: 4

SEX: Female

DAY ON TEST: 672

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61152

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 17-28]			
[Leukemia Mononuclear TGLS = 11-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-21]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-5,9-26]			
* Nose	Mucosa	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Ovary		Leukemia Mononuclear	
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 14-1,15-1]			
* Salivary Glands		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 16-6]			
* Uterus		Leukemia Mononuclear	
		Polyp Stromal	
[Polyp Stromal TGLS = 5-7]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 945

TRT#: 4

SEX: Female

DAY ON TEST: 866

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62533

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Degeneration Hypertrophy Leukemia Mononuclear	Mild Fatty, Mild Focal, Minimal
[Leukemia Mononuclear TGLS = 5-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear Mineralization Nephropathy	Minimal Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Mild
[Leukemia Mononuclear TGLS = 6-6]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation Fibroadenoma	Mild
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 2-21]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 945	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Moribund Sacrifice	DAY ON TEST: 866 HISTO: 92-62533
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ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas		Atrophy	Mild
* Pituitary Gland	Pars Distalis	Angiectasis	Moderate
	Pars Intermed	Angiectasis	Moderate
	Pars Distalis	Hyperplasia	Focal, Minimal
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-6]		
* Stomach, Forestomach		Edema	Mild
	Epithelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH	- Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 946

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 912

HISTO: 92-62971

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Eosinophilic Focus	Moderate
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 2-7]			
* Spleen	Red Pulp	Atrophy	Moderate
		Pigmentation	Hemosiderin, Moderate
[Atrophy TGLS = 3-22]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 947

TRT#: 4

SEX: Female

DAY ON TEST: 897

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63058

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Uterus			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Degeneration Leukemia Mononuclear	Fatty, Minimal
[Leukemia Mononuclear TGLS = 8-10]			
* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Leukemia Mononuclear Myelofibrosis	Moderate
* Clitoral Gland		Adenoma Leukemia Mononuclear	
[Adenoma TGLS = 1-21]			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney	Renal Tubule Renal Tubule	Atrophy Dilatation Leukemia Mononuclear	Moderate Mild
* Liver		Nephropathy Hepatodiaphragmatic Nodule Leukemia Mononuclear	Minimal
[Hepatodiaphragmatic Nodule TGLS = 14-27]			
Lymph Node	Deep Cervical Iliac Mediastinal Pancreatic	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 947	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Moribund Sacrifice	DAY ON TEST: 897 HISTO: 92-63058
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ORGAN AND ACCOUNTABLE SITE STATUS

	Renal	Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 12-3-1]		
	[Leukemia Mononuclear TGLS = 13-26]		
	[Leukemia Mononuclear TGLS = 11-25]		
	[Leukemia Mononuclear TGLS = 10-24]		
	[Leukemia Mononuclear TGLS = 7-22]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 2-8]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 9-23]		
* Mammary Gland		Dilatation	Mild
* Pancreas		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 6-7]		
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Moderate
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 5-6]		
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH - Clitoral Gland Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 948

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 911

HISTO: 92-63059

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Marked
[Atrophy TGLS = 5-1-1]			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Mild
[Nephropathy TGLS = 2-5]		Nephropathy	Moderate
* Liver	Bile Duct	Hyperplasia	Minimal
[Leukemia Mononuclear TGLS = 3-6]		Inflammation	Granulomatous, Minimal
		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Hyperplasia	Mild
[Hyperplasia TGLS = 1-8]			
* Nose	Globet Cell	Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 6-1]			
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 949

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63060

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Bone Marrow	Infiltration Cellular	Histiocyte, Moderate
* Heart	Cardiomyopathy	Moderate
* Kidney	Mineralization	Minimal
	Nephropathy	Minimal
* Liver	Eosinophilic Focus	Moderate
[Eosinophilic Focus TGLS = 2-6]		
* Lung	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular	Ectasia	Mild
	Hyperplasia	Lymphoid, Mild
* Mammary Gland	Dilatation	Minimal
[Dilatation TGLS = 1-8]		
* Pancreas	Atrophy	Moderate
* Spleen	Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 950

TRT#: 4

SEX: Female

DAY ON TEST: 855

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Parathyroid Gland
* Salivary Glands	* Skin	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Leukemia Mononuclear	
	[Leukemia Mononuclear TGLS = 4-10]		
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Mild
	[Atrophy TGLS = 8-1-1]		
* Heart		Leukemia Mononuclear	
* Kidney	Renal Tubule	Atrophy	Mild
		Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
	[Atrophy TGLS = 5-5]		
* Liver		Leukemia Mononuclear	
		Necrosis	Focal, Mild
	Kupffer Cell	Pigmentation	Mild
	[Leukemia Mononuclear TGLS = 6-6]		
* Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 7-3-1]		
* Lymph Node, Mandibular		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 950

TRT#: 4

SEX: Female

DAY ON TEST: 855

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62384

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mesenteric

Leukemia Mononuclear

* Mammary Gland

Dilatation

Mild

[Dilatation TGLS = 1-8]

* Nose

Goblet Cell

Hyperplasia

Minimal

* Ovary

Cyst

Moderate

[Cyst TGLS = 2-7-1]

* Pancreas

Atrophy

Minimal

* Pituitary Gland

Pars Distalis

Adenoma

Leukemia Mononuclear

[Adenoma TGLS = 9-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

* Stomach, Forestomach

Squamous Cell Papilloma

* Stomach, Glandular

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 951

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 912

HISTO: 92-62972

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Carcinoma	
[Carcinoma TGLS = 1-21]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Atrophy	Mild
		Mineralization	Mild
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Mild
[Atrophy TGLS = 3-23]			
* Liver		Basophilic Focus	Mild
		Eosinophilic Focus	Mild
		Hepatodiaphragmatic Nodule	
[Basophilic Focus TGLS = 5-6]			
[Eosinophilic Focus TGLS = 5-6]			
[Hepatodiaphragmatic Nodule TGLS = 4-24]			
* Lung		Hemorrhage	Minimal
	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 2-8]			
* Pancreas		Atrophy	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 951

TRT#: 4
DOSE: 0.5%

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 912
HISTO: 92-62972

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland
* Spleen

Pars Distalis

Hyperplasia
Pigmentation

Focal, Mild
Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 952

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 802

HISTO: 92-62185

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

Vagina

OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
	Kupffer Cell	Leukemia Mononuclear	
	Hepatocyte	Pigmentation	Moderate
		Vacuolization Cytoplasmic	Moderate
	[Leukemia Mononuclear TGLS = 4-6]		
	[Vacuolization Cytoplasmic TGLS = 4-6]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
	[Dilatation TGLS = 1-8]		
* Pancreas		Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Intermed	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Minimal
	[Angiectasis TGLS = 6-1]		
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 952

TRT#: 4

SEX: Female

DAY ON TEST: 802

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62185

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

* Stomach, Forestomach

Erosion

Minimal

* Stomach, Glandular

Erosion

Minimal

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 953

TRT#: 4

SEX: Female

DAY ON TEST: 649

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61022

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Heart		Cardiomyopathy	Marked
* Kidney		Mineralization	Mild
* Liver		Basophilic Focus	Minimal
	Kupffer Cell	Pigmentation	Minimal
[Basophilic Focus TGLS = 4-21]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Iliac	Hemorrhage	Moderate
	Mediastinal	Hemorrhage	Mild
	Mediastinal	Hyperplasia	Lymphoid, Mild
	Mediastinal	Pigmentation	Moderate
[Hemorrhage TGLS = 6-3-1]			
[Hemorrhage TGLS = 7-22]			
[Hyperplasia TGLS = 6-3-1]			
[Pigmentation TGLS = 6-3-1]			
* Lymph Node, Mandibular		Ectasia	Mild
		Hemorrhage	Moderate
		Hyperplasia	Lymphoid, Moderate
[Ectasia TGLS = 2-8]			
[Hemorrhage TGLS = 2-8]			
[Hyperplasia TGLS = 2-8]			
* Lymph Node, Mesenteric		Hemorrhage	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 953

TRT#: 4

SEX: Female

DAY ON TEST: 649

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61022

ORGAN AND ACCOUNTABLE SITE STATUS

[Hemorrhage TGLS = 5-5]		Pigmentation	Mild
[Pigmentation TGLS = 5-5]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
	Pars Intermed	Angiectasis	Moderate
* Saliv Glands			
Note: EXTENSIVE EDEMA IN AND AROUND SALIVARY GLANDS; NOT CODED.			
* Skin	Subcut Tiss	Edema	Marked
[Edema TGLS = 1-8]			
* Spleen		Pigmentation	Hemosiderin, Moderate
PRIMARY CAUSE OF DEATH	- Heart	Cardiomyopathy	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 954

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62952

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
Tongue	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Cyst	Moderate
[Cyst TGLS = 1-8]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Atrophy	Moderate
		Mineralization	Mild
	Renal Tubule	Nephropathy	Minimal
[Atrophy TGLS = 5-5,5-23]		Pigmentation	Mild
* Liver	Bile Duct	Basophilic Focus	Mild
		Hyperplasia	Minimal
[Basophilic Focus TGLS = 6-6]		Leukemia Mononuclear	
* Lymph Node, Mandibular		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-5]			
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLS = 2-21]			
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Intermed	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Moderate
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 954

TRT#: 4
DOSE: 0.5%

SEX: Female
DISP: Terminal Sacrifice

DAY ON TEST: 911
HISTO: 92-62952

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-22]

* Uterus

Hydrometra

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 955

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62973

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lung | * Lymph Node, Mesenteric |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | | |
|-----------------------------------|---------------|----------------------------------|-------------------|
| * Clitoral Gland | | Cyst | Moderate |
| * Islets, Pancreatic | | Hyperplasia | Mild |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | Mild |
| | | Eosinophilic Focus | Moderate |
| | Bile Duct | Hyperplasia | Minimal |
| [Basophilic Focus TGLS = 2-6] | | | |
| [Eosinophilic Focus TGLS = 2-6] | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphoid, Mild |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLS = 1-21] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| | | Pigmentation | Hemosiderin, Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 956

TRT#: 4

SEX: Female

DAY ON TEST: 909

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63061

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Ovary
* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

Vagina

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Atrophy	Moderate
	Renal Tubule	Dilatation	Mild
		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Angiectasis	Mild
		Basophilic Focus	Moderate
[Angiectasis TGLS = 6-6]			
Lymph Node	Mediastinal	Hemorrhage	Mild
	Mediastinal	Pigmentation	Moderate
[Hemorrhage TGLS = 8-3-1]			
[Pigmentation TGLS = 8-3-1]			
* Lymph Node, Mandibular		Hemorrhage	Moderate
[Hemorrhage TGLS = 2-8]			
* Lymph Node, Mesenteric		Hemorrhage	Moderate
[Hemorrhage TGLS = 7-5]			
* Mammary Gland		Dilatation	Mild
* Pancreas		Atrophy	Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 956

TRT#: 4

SEX: Female

DAY ON TEST: 909

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63061

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland

Pars Distalis

Adenoma

* Skin

Pars Distalis

Cyst

Moderate

Subcut Tiss

Edema

Moderate

[Edema TGLS = 1-8]

* Spleen

Hematopoietic Cell Proliferation

Mild

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 957

TRT#: 4

SEX: Female

DAY ON TEST: 837

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62186

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Clitoral Gland		Hyperplasia	Mild
* Kidney	Renal Tubule	Atrophy	Moderate
	Transit Epithe	Hyperplasia	Mild
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	Minimal
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 1-21]			
* Pancreas		Atrophy	Minimal
	Acinus	Cytoplasmic Alteration	Moderate
* Spleen		Leukemia Mononuclear	
* Thyroid Gland		Ultimobranchial Cyst	Moderate

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 958

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 912

HISTO: 92-62974

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Minimal
* Liver		Angiectasis	Mild
		Basophilic Focus	Minimal
		Eosinophilic Focus	Moderate
		Mixed Cell Focus	Moderate
[Basophilic Focus TGLS = 1-6]			
[Eosinophilic Focus TGLS = 1-6]			
[Mixed Cell Focus TGLS = 1-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLS = 2-2]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Pituitary Gland	Pars Distalis	Angiectasis	Minimal
	Pars Intermed	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Minimal
* Spleen		Pigmentation	Hemosiderin, Moderate
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 959

TRT#: 4

SEX: Female

DAY ON TEST: 837

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62187

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Mild
		Degeneration	Fatty, Minimal
* Brain		Gliosis	Mild
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Skin	Subcut Tiss	Fibroma	
[Fibroma TGLS = 1-21]			
* Spleen		Hematopoietic Cell Proliferation	Mild
		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Minimal
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

CONTRIBUTORY CAUSE OF DEATH

- Brain Gliosis;Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 960

TRT#: 4

SEX: Female

DAY ON TEST: 788

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61684

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Parathyroid Gland	Vagina
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OBSERVATIONS

* Brain	Atrophy	Moderate
	Hydrocephalus	Mild
[Atrophy TGLS = 10-1-1]		
* Heart	Cardiomyopathy	Mild
* Intestine Large, Colon	Parasite Metazoan	
* Kidney	Inflammation	Chronic, Mild
	Mineralization	Minimal
	Nephropathy	Moderate
[Nephropathy TGLS = 5-5]		
* Liver	Eosinophilic Focus	Moderate
[Eosinophilic Focus TGLS = 7-6]		
* Lung	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland	Fibroadenoma	
	Hyperplasia	Moderate
[Fibroadenoma TGLS = 1-21]		
[Hyperplasia TGLS = 2-8]		
* Ovary	Cyst	Moderate
[Cyst TGLS = 3-7]		
* Pituitary Gland	Pars Distalis	Adenoma
[Adenoma TGLS = 9-1]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 960

TRT#: 4

SEX: Female

DAY ON TEST: 788

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61684

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 961

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62953

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Mammary Gland	* Nose	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Minimal
[Atrophy TGLS = 12-1-1]			
* Clitoral Gland		Carcinoma	
[Carcinoma TGLS = 1-21]			
* Kidney		Mineralization	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal
* Liver		Basophilic Focus	Minimal
[Basophilic Focus TGLS = 7-6]		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-3-1]		Pigmentation	Mild
[Leukemia Mononuclear TGLS = 5-24]			
[Leukemia Mononuclear TGLS = 4-23]			
[Leukemia Mononuclear TGLS = 10-26]			
[Pigmentation TGLS = 9-3-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 961

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 911

HISTO: 92-62953

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular [Leukemia Mononuclear TGLS = 2-8]		Leukemia Mononuclear	
* Lymph Node, Mesenteric [Ectasia TGLS = 6-25] [Leukemia Mononuclear TGLS = 6-25]		Ectasia Hemorrhage Leukemia Mononuclear	Marked Moderate
* Ovary		Cyst	Moderate
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland [Adenoma TGLS = 11-1]	Pars Distalis	Adenoma	
* Spleen [Leukemia Mononuclear TGLS = 3-22]		Leukemia Mononuclear	
* Thymus [Leukemia Mononuclear TGLS = 8-3]		Leukemia Mononuclear	
Tongue [Hyperplasia TGLS = 13-27]	Epithelium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 962

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62954

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Clitoral Gland		Hyperplasia	Mild
* Kidney		Mineralization	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Basophilic Focus	Minimal
	Kupffer Cell	Leukemia Mononuclear	
		Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 2-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mediastinal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 3-3-1]		
* Mammary Gland		Dilatation	Mild
* Spleen		Leukemia Mononuclear	
		Pigmentation	Hemosiderin, Mild
	[Leukemia Mononuclear TGLS = 1-21]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 963

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63062

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
		Hypertrophy	Focal, Mild
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
		Eosinophilic Focus	Mild
	Bile Duct	Hyperplasia	Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Galactocele	Marked
[Galactocele TGLS = 1-8]			
* Ovary		Cyst	Moderate
[Cyst TGLS = 2-7]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Mild
* Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 964

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62955

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
Tongue	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Kidney	Renal Tubule	Atrophy Mineralization Nephropathy	Mild Minimal Minimal
* Liver		Angiectasis Basophilic Focus	Moderate Mild
			[Angiectasis TGLS = 2-22] [Basophilic Focus TGLS = 1-6]
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
* Spleen		Pigmentation	Hemosiderin, Mild
* Thyroid Gland	C Cell	Carcinoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 965

TRT#: 4

SEX: Female

DAY ON TEST: 849

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Hypertrophy	Focal, Minimal
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
[Adenoma TGLS = 1-8-1]			
* Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
* Islets, Pancreatic		Adenoma	
[Adenoma TGLS = 11-7-1]			
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Moderate
[Leukemia Mononuclear TGLS = 4-6]			
* Lung		Alveolar/Bronchiolar Adenoma	
		Hemorrhage	Minimal
	Alveolar Epith	Hyperplasia	Moderate
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 965	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Moribund Sacrifice	DAY ON TEST: 849 HISTO: 92-62385
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ORGAN AND ACCOUNTABLE SITE STATUS

[Alveolar/Bronchiolar Adenoma TGLS = 9-2-2]		
[Hemorrhage TGLS = 5-2-1]		
[Hyperplasia TGLS = 6-2]		
[Leukemia Mononuclear TGLS = 6-2]		
Lymph Node	Pancreatic	Leukemia Mononuclear
[Leukemia Mononuclear TGLS = 10-7]		
* Lymph Node, Mandibular		Leukemia Mononuclear
* Lymph Node, Mesenteric		Leukemia Mononuclear
* Ovary		Leukemia Mononuclear
* Pituitary Gland		Leukemia Mononuclear
* Spleen		Leukemia Mononuclear
[Leukemia Mononuclear TGLS = 3-6]		
* Uterus		Leukemia Mononuclear

PRIMARY CAUSE OF DEATH	- Liver	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Clitoral Gland	Adenoma;Islets;Pancreatic Adenoma;Lung Alveolar/Bronchiolar Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 966

TRT#: 4

SEX: Female

DAY ON TEST: 400

DOSE: 0.5%

DISP: Natural Death

HISTO: 91-59180

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Intestine Large, Colon
* Lymph Node, Mesenteric
* Salivary Glands
* Thymus

* Adrenal Medulla
* Brain
* Intestine Large, Rectum
* Nose
* Skin
* Urinary Bladder

* Blood Vessel
* Clitoral Gland
* Liver
* Ovary
* Spleen
* Uterus

* Bone
* Heart
* Lymph Node, Mandibular
* Pituitary Gland
* Stomach, Glandular

MISSING

* Esophagus
* Thyroid Gland

* Mammary Gland
* Trachea

* Parathyroid Gland

* Stomach, Forestomach

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum
* Islets, Pancreatic

* Intestine Small, Duodenum
* Pancreas

* Intestine Small, Ileum

* Intestine Small, Jejunum

OBSERVATIONS

* Kidney
* Lung

Mineralization
Edema
Hemorrhage

Mild
Moderate
Moderate

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 967

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62956

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Mild
		Hyperplasia	Focal, Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Atrophy	Mild
[Atrophy TGLS = 8-1-1]			
* Clitoral Gland		Carcinoma	
[Carcinoma TGLS = 1-21,1-21-1]			
* Kidney		Mineralization	Moderate
		Nephropathy	Moderate
* Lung		Infiltration Cellular	Histiocyte, Mild
[Infiltration Cellular TGLS = 5-2-1,6-2-2]			
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Dilatation TGLS = 3-8]			
[Fibroadenoma TGLS = 2-22]			
* Nose	Globet Cell	Hyperplasia	Minimal
* Ovary		Cyst	Moderate
[Cyst TGLS = 4-7]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-1-1]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 967

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62956

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Polyp Stromal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 968

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 856

HISTO: 92-62386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Adrenal Medulla		Hyperplasia	Moderate
		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Atrophy	Moderate
		Leukemia Mononuclear	
Note: EXTENSIVE HEMORRHAGE AND NECROSIS ASSOC. WITH LEUKEMIA MONUC; NOT CODED ON TDMS.			
[Atrophy TGLS = 9-1-1]			
[Leukemia Mononuclear TGLS = 8-1,8-1-1]			
* Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Mild
[Leukemia Mononuclear TGLS = 6-5]			
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-6]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 11-7]			
[Pigmentation TGLS = 11-7]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 968

TRT#: 4

SEX: Female

DAY ON TEST: 856

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62386

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Mandibular		Leukemia Mononuclear Pigmentation	Mild
* Lymph Node, Mesenteric [Leukemia Mononuclear TGLS = 4-5]		Leukemia Mononuclear	
* Mammary Gland Mesentery	Fat	Dilatation Necrosis	Minimal Marked
[Necrosis TGLS = 3-21]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Ovary [Cyst TGLS = 2-7-1]		Cyst	Moderate
* Pituitary Gland	Pars Distalis	Adenoma Leukemia Mononuclear	
[Adenoma TGLS = 10-1] [Leukemia Mononuclear TGLS = 10-1]			
* Skin	Epidermis	Hyperplasia Ulcer	Mild Mild
[Hyperplasia TGLS = 1-22] [Ulcer TGLS = 1-22]			
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular [Erosion TGLS = 12-4]		Erosion Leukemia Mononuclear	Moderate
* Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 969

TRT#: 4

SEX: Female

DAY ON TEST: 885

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-63063

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Parathyroid Gland	* Salivary Glands
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Mild
* Adrenal Medulla		Hyperplasia	Minimal
Eye	Retina	Cataract	Moderate
		Degeneration	Moderate
	[Cataract TGLS = 1-21]		
* Heart		Cardiomyopathy	Mild
		Thrombosis	Marked
	[Thrombosis TGLS = 6-5-1]		
* Kidney		Mineralization	Moderate
* Liver	Bile Duct	Hepatodiaphragmatic Nodule	
		Hyperplasia	Minimal
	[Hepatodiaphragmatic Nodule TGLS = 5-22]		
* Lung		Edema	Mild
		Infiltration Cellular	Histiocyte, Moderate
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Intermed	Angiectasis	Mild
	Pars Distalis	Cyst	Moderate
	[Angiectasis TGLS = 7-1]		
	[Angiectasis TGLS = 7-1]		
* Skin	Subcut Tiss	Edema	Moderate
	[Edema TGLS = 2-8]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 969	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Natural Death	DAY ON TEST: 885 HISTO: 92-63063
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ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen	Lymph Follic	Atrophy Hematopoietic Cell Proliferation Pigmentation	Moderate Mild Hemosiderin, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Heart Thrombosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 970

TRT#: 4

SEX: Female

DAY ON TEST: 841

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Degeneration Leukemia Mononuclear	Fatty, Mild
[Leukemia Mononuclear TGLS = 9-10]			
* Bone Marrow		Leukemia Mononuclear Myelofibrosis	Mild
* Brain		Atrophy	Minimal
[Atrophy TGLS = 15-1-1]			
* Clitoral Gland		Adenoma	
[Adenoma TGLS = 5-23]			
* Kidney		Mineralization Nephropathy	Mild Mild
[Nephropathy TGLS = 10-5]			
* Liver	Kupffer Cell	Leukemia Mononuclear Pigmentation	Mild
[Leukemia Mononuclear TGLS = 11-6]			
Lymph Node	Mediastinal Pancreatic Renal	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-7]	Mediastinal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 4-22]			
[Leukemia Mononuclear TGLS = 13-24]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 970

TRT#: 4

SEX: Female

DAY ON TEST: 841

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62387

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-3-1]			
[Pigmentation TGLS = 3-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 12-5]			
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			
* Pituitary Gland		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 16-1]			
* Skin	Epidermis	Hyperplasia Inflammation	Mild Chronic, Minimal
[Hyperplasia TGLS = 2-21]			
[Inflammation TGLS = 2-21]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-6]			
* Thymus		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 14-3]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Clitoral Gland Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 971

TRT#: 4

SEX: Female

DAY ON TEST: 773

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61685

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 5-6]	
* Lung		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 6-2]	
Lymph Node	Pancreatic	Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 3-7]	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
* Ovary		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 1-7]	
* Spleen		Leukemia Mononuclear	
		[Leukemia Mononuclear TGLS = 2-6]	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 972

TRT#: 4

SEX: Female

DAY ON TEST: 673

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61153

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Marked
* Clitoral Gland		Adenoma	
* Heart		Schwannoma Benign	
[Schwannoma Benign TGLS = 4-5]			
* Kidney	Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 3-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-21]			
* Mammary Gland		Dilatation	Mild
* Pituitary Gland	Pars Intermed	Cyst	Moderate
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 972

TRT#: 4

SEX: Female

DAY ON TEST: 673

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61153

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH - Heart Schwannoma Benign

Animal Note: PARTIAL ATROPHY OF LYMPHOID TISSUE IN SPLEEN AND LYMPH NODES ASSOC. WITH LEUKEMI A.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 973

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 593

HISTO: 91-60081

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule Leukemia Mononuclear	Moderate
[Leukemia Mononuclear TGLS = 5-10]			
* Bone Marrow		Leukemia Mononuclear	
* Kidney	Renal Tubule	Dilatation Leukemia Mononuclear Mineralization	Mild Mild
* Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-6]			
Lymph Node	Mediastinal Pancreatic Mediastinal	Leukemia Mononuclear Leukemia Mononuclear Pigmentation	 Moderate
[Leukemia Mononuclear TGLS = 8-3-1]			
[Leukemia Mononuclear TGLS = 4-7-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Ovary		Cyst	Moderate
[Cyst TGLS = 1-7]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-6,3-21]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 974

TRT#: 4

SEX: Female

DAY ON TEST: 856

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

INSUFFICIENT TISSUE

* Lymph Node, Mesenteric

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Myelofibrosis	Marked
* Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Atrophy	Mild
	Renal Tubule	Dilatation	Mild
		Mineralization	Mild
		Nephropathy	Minimal
* Liver	Renal Tubule	Pigmentation	Mild
		Basophilic Focus	Minimal
		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
Mesentery	Fat	Necrosis	Marked
		[Necrosis TGLS = 3-21]	
* Pancreas		Note: MODERATE INTERSTITIAL EDEMA AND EARLY FIBROSIS IN PANCREAS (TGL 2-7); NOT CODED ON TDMS.	
* Pituitary Gland	Pars Distalis	Adenoma	
	Pars Intermed	Angiectasis	Mild
		[Adenoma TGLS = 5-1]	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 974

TRT#: 4

SEX: Female

DAY ON TEST: 856

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62388

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen	Lymph Follic	Atrophy Fibrosis Pigmentation	Moderate Mild Hemosiderin, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Mesentery Fat Necrosis; Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 975

TRT#: 4

SEX: Female

DAY ON TEST: 780

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61686

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lymph Node, Mesenteric	* Nose	* Ovary	* Parathyroid Gland
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Bone	Femur	Osteopetrosis	Moderate
* Clitoral Gland		Adenoma	
* Heart		Cardiomyopathy	Moderate
* Islets, Pancreatic		Adenoma	
* Kidney	Renal Tubule	Atrophy	Moderate
		Nephropathy	Minimal
* Liver	Bile Duct	Basophilic Focus	Mild
	Kupffer Cell	Hyperplasia	Mild
		Pigmentation	Marked
		[Hyperplasia TGLS = 4-6,5-6]	
		[Pigmentation TGLS = 4-6,5-6]	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
		[Fibroadenoma TGLS = 2-22]	
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Cyst	Moderate
		[Cyst TGLS = 7-1]	
* Salivary Glands		Schwannoma Malignant	
		[Schwannoma Malignant TGLS = 1-21]	
* Spleen		Pigmentation	Hemosiderin, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 975

TRT#: 4

SEX: Female

DAY ON TEST: 780

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61686

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Salivary Glands Schwannoma Malignant

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 976

TRT#: 4

SEX: Female

DAY ON TEST: 712

DOSE: 0.5%

DISP: Natural Death

HISTO: 92-61426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Brain		Atrophy	Moderate
[Atrophy TGLS = 2-1-1]			
* Kidney		Mineralization	Minimal
* Liver		Basophilic Focus	Minimal
* Lymph Node, Mandibular		Hemorrhage	Minimal
		Pigmentation	Mild
* Mammary Gland		Dilatation	Mild
* Ovary		Cyst	Moderate
[Cyst TGLS = 1-7]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 3-1]			
* Spleen		Pigmentation	Hemosiderin, Moderate

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 977

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63064

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Brain		Atrophy	Marked
		Hydrocephalus	Moderate
[Atrophy TGLS = 8-1-1]			
* Clitoral Gland		Carcinoma	
[Carcinoma TGLS = 4-22,5-22]			
* Heart		Cardiomyopathy	Mild
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Eosinophilic Focus	Moderate
	Hepatocyte	Vacuolization Cytoplasmic	Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLS = 6-2-1]			
* Lymph Node, Mandibular		Pigmentation	Mild
[Pigmentation TGLS = 2-8]			
* Mammary Gland		Dilatation	Moderate
		Fibroadenoma	Multiple
[Dilatation TGLS = 1-8]			
[Fibroadenoma TGLS = 3-21,11-23]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 9-1]			
* Spleen		Pigmentation	Hemosiderin, Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 977	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Terminal Sacrifice	DAY ON TEST: 912 HISTO: 92-63064
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ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach		Erosion	Mild
	Epithelium	Hyperplasia	Mild
[Erosion TGLS = 10-4]			
[Hyperplasia TGLS = 10-4]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 978

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62957

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Clitoral Gland

OBSERVATIONS

* Bone [Osteopetrosis TGLS = 4-23]	Cranium	Osteopetrosis	Moderate
* Kidney		Nephropathy	Minimal
* Liver [Basophilic Focus TGLS = 3-22]		Basophilic Focus	Moderate
* Lung		Infiltration Cellular	Histiocyte, Mild
* Mammary Gland [Fibroadenoma TGLS = 2-21]		Dilatation Fibroadenoma	Mild
* Spleen		Pigmentation	Hemosiderin, Mild
* Stomach, Forestomach [Squamous Cell Papilloma TGLS = 5-4-1]		Squamous Cell Papilloma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 979

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63065

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Eosinophilic Focus	Mild
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Hemorrhage	Moderate
	Iliac	Pigmentation	Moderate
	Mediastinal	Pigmentation	Moderate
[Hemorrhage TGLS = 6-3-1]			
[Pigmentation TGLS = 2-21]			
[Pigmentation TGLS = 6-3-1]			
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1]			
* Spleen		Pigmentation	Hemosiderin, Mild
* Thyroid Gland		Ultimobranchial Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 980

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62975

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Brain		Atrophy	Moderate
[Atrophy TGLS = 4-1-1]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Atrophy	Moderate
	Transit Epithe	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mineralization	Mild
		Nephropathy	Moderate
* Liver		Basophilic Focus	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLS = 3-2-1]			
* Lymph Node, Mesenteric		Hemorrhage	Mild
* Mammary Gland		Galactocele	Marked
[Galactocele TGLS = 1-21,2-8]			
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1-1]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Mild
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 981

TRT#: 4

SEX: Female

DAY ON TEST: 540

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 91-59835

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Atrophy	Moderate
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Moderate
* Kidney		Hydronephrosis	Mild
		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Minimal
	[Leukemia Mononuclear TGLS = 3-6]		
* Lung		Fibrosis	Marked
	[Fibrosis TGLS = 8-2-1]	Leukemia Mononuclear	
Lymph Node	Iliac	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
	Pancreatic	Pigmentation	Mild
	Renal	Pigmentation	Moderate
	[Leukemia Mononuclear TGLS = 4-7-1]		
	[Leukemia Mononuclear TGLS = 9-3]		
	[Leukemia Mononuclear TGLS = 7-22]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 981

TRT#: 4

SEX: Female

DAY ON TEST: 540

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 91-59835

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 6-21]

[Pigmentation TGLS = 2-8]

[Pigmentation TGLS = 7-22]

* Lymph Node, Mandibular

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 2-8]

* Nose

Goblet Cell

Hyperplasia

Minimal

* Ovary

Cyst

Moderate

[Cyst TGLS = 5-7]

* Pancreas

Note: PANCREAS IS EDEMATOUS; MORPHOLOGY NOT AVAILABLE ON TDMS.

* Pituitary Gland

Pars Distalis

Hyperplasia

Focal, Mild

[Hyperplasia TGLS = 11-1]

* Spleen

Leukemia Mononuclear

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 982

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 741

HISTO: 92-61427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Brain		Atrophy	Marked
		Hydrocephalus	Mild
	[Atrophy TGLS = 3-1-1]		
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Mammary Gland		Dilatation	Moderate
	[Dilatation TGLS = 2-8]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[Adenoma TGLS = 4-1]		
* Skin	Epidermis	Hyperplasia	Mild
		Inflammation	Chronic, Mild
		Ulcer	Mild
	Note: SKIN ULCER IS ON SLIDE 8.		
	[Hyperplasia TGLS = 1-21]		
	[Inflammation TGLS = 1-21]		
* Spleen		Hematopoietic Cell Proliferation	Mild
		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 982

TRT#: 4

SEX: Female

DAY ON TEST: 741

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61427

ORGAN AND ACCOUNTABLE SITE STATUS

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 983

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63066

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Bone Marrow		Inflammation	Granulomatous, Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Atrophy	Moderate
	Renal Tubule	Dilatation	Moderate
		Mineralization	Mild
		Nephropathy	Mild
* Liver		Angiectasis	Mild
		Basophilic Focus	Mild
		Clear Cell Focus	Marked
		Inflammation	Granulomatous, Minimal
[Basophilic Focus TGLS = 5-6]			
[Clear Cell Focus TGLS = 4-22]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Cyst	Moderate
	Pars Distalis	Hyperplasia	Focal, Mild
* Spleen		Hyperplasia	Lymphoid, Marked
		Pigmentation	Hemosiderin, Moderate
[Hyperplasia TGLS = 2-21]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
[Hyperplasia TGLS = 6-23]			
* Uterus		Sarcoma Stromal	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 983

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63066

ORGAN AND ACCOUNTABLE SITE STATUS

[Sarcoma Stromal TGLS = 3-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 984

TRT#: 4

SEX: Female

DAY ON TEST: 823

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62188

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[Pheochromocytoma Malignant TGLS = 5-21]			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Centrilobular	Necrosis	Mild
	Kupffer Cell	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 8-6]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 4-7]			
[Pigmentation TGLS = 4-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-5]			
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 2-8]			
* Ovary		Cyst	Moderate

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 984

TRT#: 4

SEX: Female

DAY ON TEST: 823

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62188

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLS = 1-7]

* Pituitary Gland

Pars Distalis

Hyperplasia

Focal, Moderate

Leukemia Mononuclear

[Hyperplasia TGLS = 9-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Adrenal Medulla Pheochromocytoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 985

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 912

HISTO: 92-62976

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone Marrow	* Brain
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Focal, Moderate
* Bone	Cranium	Osteopetrosis	Moderate
	Femur	Osteopetrosis	Mild
	[Osteopetrosis TGLS = 6-22]		
* Clitoral Gland		Cyst	Moderate
* Heart		Cardiomyopathy	Mild
	Note: MODERATE LYMPHOID INFILTRATE IN ENDOCARDIUM BENEATH AORTIC VALVE; NOT CODED ON TDMS.		
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	Minimal
	Bile Duct	Hyperplasia	Mild
	Kupffer Cell	Pigmentation	Minimal
	[Basophilic Focus TGLS = 4-6]		
* Lung		Infiltration Cellular	Histiocyte, Minimal
	[Infiltration Cellular TGLS = 5-2-1]		
* Lymph Node, Mandibular		Hemorrhage	Minimal
		Pigmentation	Mild
* Lymph Node, Mesenteric		Hemorrhage	Mild
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
	[Dilatation TGLS = 1-8]		
	[Fibroadenoma TGLS = 2-21]		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 985

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62976

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland

Pars Distalis

Angiectasis

Mild

* Uterus

Hydrometra

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 986

TRT#: 4

SEX: Female

DAY ON TEST: 499

DOSE: 0.5%

DISP: Natural Death

HISTO: 91-59836

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart	Endocardium	Hyperplasia	Moderate
		Thrombosis	Moderate
	[Thrombosis TGLS = 4-5-1]		
* Kidney		Mineralization	Moderate
* Liver		Angiectasis	Mild
	Note: No correlating lesion to TGL 2-6.		
* Lung		Edema	Mild
Lymph Node	Mediastinal	Pigmentation	Marked
	[Pigmentation TGLS = 5-3]		
* Lymph Node, Mandibular		Hemorrhage	Moderate
		Pigmentation	Moderate
* Lymph Node, Mesenteric		Hemorrhage	Moderate
	[Hemorrhage TGLS = 3-5]		
* Spleen		Hematopoietic Cell Proliferation	Mild
		Pigmentation	Hemosiderin, Mild
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH - Heart Endocardium Hyperplasia

CONTRIBUTORY CAUSE OF DEATH - Heart Thrombosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 987

TRT#: 4

SEX: Female

DAY ON TEST: 911

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-62958

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Cortex		Degeneration	Fatty, Moderate
		Hypertrophy	Focal, Moderate
* Clitoral Gland		Carcinoma	
		Inflammation	Chronic, Mild
Note: A PORTION OF THE CLITORAL GLAND CARCINOMA IS ON SLIDE 8. [Carcinoma TGLS = 1-21]			
* Heart		Cardiomyopathy	Moderate
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Granulomatous, Minimal
[Basophilic Focus TGLS = 4-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLS = 5-2-1]			
* Mammary Gland		Dilatation	Minimal
[Dilatation TGLS = 2-8]			
[Fibroadenoma TGLS = 3-22]			
* Spleen		Hematopoietic Cell Proliferation	Minimal
* Thyroid Gland		Ultimobranchial Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 988

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 768

HISTO: 92-61576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Mineralization	Minimal
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Minimal
	Hepatocyte	Vacuolization Cytoplasmic	Marked
Lymph Node	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
	Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 7-22]			
[Leukemia Mononuclear TGLS = 4-7]			
[Pigmentation TGLS = 7-22]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
[Dilatation TGLS = 1-8]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 988

TRT#: 4

SEX: Female

DAY ON TEST: 768

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61576

ORGAN AND ACCOUNTABLE SITE STATUS

* Ovary

Note: OVARIAN CORPUS LUTEA APPEAR PROMINENT (TGL 2); NOT CODED ON TDMS.

* Pituitary Gland

Pars Distalis

Angiectasis

Moderate

Pars Distalis

Hyperplasia

Focal, Moderate

[Angiectasis TGLS = 8-1]

[Hyperplasia TGLS = 8-1]

* Spleen

Leukemia Mononuclear

[Leukemia Mononuclear TGLS = 3-6]

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 989

TRT#: 4

SEX: Female

DAY ON TEST: 688

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Brain	* Clitoral Gland
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-10]			
* Adrenal Medulla		Leukemia Mononuclear	
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
* Lung		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-2]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Pancreatic	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 2-7-1]			
[Leukemia Mononuclear TGLS = 7-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-5]			
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 989

TRT#: 4

SEX: Female

DAY ON TEST: 688

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61154

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLS = 3-6]

[Necrosis TGLS = 4-21]

Necrosis

Marked

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 990

TRT#: 4

SEX: Female

DAY ON TEST: 913

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63067

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Kidney	Renal Tubule	Atrophy Nephropathy	Moderate Mild
[Atrophy TGLS = 1-5,1-21]			
* Liver	Bile Duct Kupffer Cell	Eosinophilic Focus Hyperplasia Pigmentation	Moderate Minimal Minimal
[Eosinophilic Focus TGLS = 2-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Dilatation	Mild
* Ovary		Granulosa Cell Tumor Benign	
* Pituitary Gland	Pars Distalis	Hyperplasia	Focal, Marked
[Hyperplasia TGLS = 3-1]			
* Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 992

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 912

HISTO: 92-63068

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Blood Vessel	* Bone	* Bone Marrow
* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mandibular	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
[Pheochromocytoma Benign TGLS = 3-10]			
* Brain		Atrophy	Moderate
[Atrophy TGLS = 6-1-1]			
* Clitoral Gland		Adenoma	
[Adenoma TGLS = 2-22]			
* Heart		Cardiomyopathy	Minimal
* Kidney		Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	Minimal
		Eosinophilic Focus	Mild
	Bile Duct	Hyperplasia	Minimal
[Leukemia Mononuclear TGLS = 4-6]		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Pancreas		Atrophy	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-1-1]			
* Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04
Test Type: CHRONIC
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone
CAS Number: 1948-33-0

Date Report Requested: 10/21/2014
Time Report Requested: 05:03:03
First Dose M/F: NA / NA
Lab: SRI

ANIMAL ID: 992

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63068

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

Follicle

Cyst

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 993

TRT#: 4

SEX: Female

DAY ON TEST: 872

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-63069

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	Peripheral Nerve	* Pituitary Gland
* Salivary Glands	* Skin	Spinal Cord	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Adrenal Cortex		Leukemia Mononuclear	
* Adrenal Medulla		Leukemia Mononuclear	
* Bone	Femur	Osteopetrosis	Mild
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Minimal
* Intestine Large, Cecum		Edema	Moderate
[Edema TGLS = 3-4]			
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Mild
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 1-6]			

PRIMARY CAUSE OF DEATH

- Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 994

TRT#: 4

SEX: Female

DAY ON TEST: 862

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-62389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Islets, Pancreatic	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Peripheral Nerve
* Salivary Glands	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-10]			
* Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
* Brain		Leukemia Mononuclear	
* Clitoral Gland		Hyperplasia	Mild
[Hyperplasia TGLS = 3-8-1]			
* Heart		Leukemia Mononuclear	
* Intestine Small, Duodenum		Leukemia Mononuclear	
* Intestine Small, Ileum		Leukemia Mononuclear	
* Intestine Small, Jejunum		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild
* Liver		Cyst	Moderate
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
[Cyst TGLS = 10-21,10-21-1]			
[Leukemia Mononuclear TGLS = 9-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 994	TRT#: 4 DOSE: 0.5%	SEX: Female DISP: Moribund Sacrifice	DAY ON TEST: 862 HISTO: 92-62389
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ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node	Mediastinal Pancreatic Renal Mediastinal Renal	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Pigmentation Pigmentation	Moderate Moderate
[Leukemia Mononuclear TGLS = 12-23]			
[Leukemia Mononuclear TGLS = 13-3-1]			
[Leukemia Mononuclear TGLS = 7-7]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-8]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 11-22]			
* Mammary Gland		Dilatation	Moderate
[Dilatation TGLS = 1-8]			
* Pituitary Gland	Pars Distalis Pars Intermed	Cyst Cyst Leukemia Mononuclear	Moderate Moderate
[Cyst TGLS = 14-1]			
Spinal Cord		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 6-6]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	
[Polyp Stromal TGLS = 5-7-1]			

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
 CONTRIBUTORY CAUSE OF DEATH - Clitoral Gland Hyperplasia;Uterus Polyp Stromal

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 995

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 696

HISTO: 92-61428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Blood Vessel | * Clitoral Gland | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Nose |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

- | | | | |
|--|--------------|---------------------------|----------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| [Leukemia Mononuclear TGLS = 6-10] | | | |
| * Bone | Femur | Osteopetrosis | Mild |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Brain | | Atrophy | Moderate |
| [Atrophy TGLS = 12-1-1] | | | |
| * Heart | | Cardiomyopathy | Mild |
| | | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Mineralization | Mild |
| | | Nephropathy | Mild |
| | Renal Tubule | Pigmentation | Moderate |
| [Leukemia Mononuclear TGLS = 7-5] | | | |
| [Nephropathy TGLS = 7-5] | | | |
| [Pigmentation TGLS = 7-5] | | | |
| * Liver | | Leukemia Mononuclear | |
| | | Necrosis | Focal, Minimal |
| | Kupffer Cell | Pigmentation | Minimal |
| | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| [Leukemia Mononuclear TGLS = 8-6] | | | |
| [Vacuolization Cytoplasmic TGLS = 8-6] | | | |
| * Lung | | Leukemia Mononuclear | |
| Lymph Node | Mediastinal | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 995

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 696

HISTO: 92-61428

ORGAN AND ACCOUNTABLE SITE STATUS

Pancreatic	Leukemia Mononuclear	
Renal	Leukemia Mononuclear	
Mediastinal	Pigmentation	Mild
Renal	Pigmentation	Moderate
[Leukemia Mononuclear TGLS = 11-3-1]		
[Leukemia Mononuclear TGLS = 10-24]		
[Leukemia Mononuclear TGLS = 4-7]		
[Pigmentation TGLS = 10-24]		
* Lymph Node, Mandibular	Leukemia Mononuclear	
* Lymph Node, Mesenteric	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 9-23]		
* Mammary Gland	Dilatation	Moderate
	Galactocele	Marked
[Dilatation TGLS = 1-8]		
[Galactocele TGLS = 2-21,3-22]		
* Pancreas	Leukemia Mononuclear	
* Pituitary Gland	Adenoma	
[Adenoma TGLS = 13-1]		
* Spleen	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 5-6]		
* Thymus	Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 996

TRT#: 4

SEX: Female

DAY ON TEST: 913

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Blood Vessel	* Bone	* Brain
* Clitoral Gland	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Adrenal Cortex		Accessory Adrenal Cortical Nodule	Minimal
* Bone Marrow		Leukemia Mononuclear	
* Heart		Cardiomyopathy	Moderate
* Kidney	Renal Tubule	Dilatation	Mild
		Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mandibular		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	
[Fibroadenoma TGLS = 1-8]			
Mesentery		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-22]			
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-6]			
* Uterus		Hydrometra	Moderate
[Hydrometra TGLS = 5-7]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 997

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63071

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Blood Vessel | * Bone | * Brain | * Esophagus |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Nose |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

Vagina

OBSERVATIONS

- | | | | |
|-------------------------------------|----------------|----------------------|-------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Clitoral Gland | | Adenoma | |
| [Adenoma TGLS = 2-22] | | | |
| * Heart | | Cardiomyopathy | Moderate |
| * Kidney | Renal Tubule | Atrophy | Moderate |
| | Renal Tubule | Dilatation | Moderate |
| | | Hydronephrosis | Mild |
| | Transit Epithe | Hyperplasia | Moderate |
| | | Inflammation | Suppurative, Mild |
| | | Leukemia Mononuclear | |
| | | Mineralization | Mild |
| | | Nephropathy | Mild |
| | Renal Tubule | Pigmentation | Moderate |
| [Atrophy TGLS = 5-5] | | | |
| [Leukemia Mononuclear TGLS = 5-5] | | | |
| * Liver | | Basophilic Focus | Mild |
| | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 997

TRT#: 4

SEX: Female

DAY ON TEST: 912

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63071

ORGAN AND ACCOUNTABLE SITE STATUS

[Basophilic Focus TGLS = 6-6]	Kupffer Cell	Pigmentation	Minimal
* Lung		Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Mediastinal	Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 7-3-1]			
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Marked
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Pancreas		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Cyst	Moderate
* Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 4-6]			
* Thymus		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 998

TRT#: 4

SEX: Female

DAY ON TEST: 913

DOSE: 0.5%

DISP: Terminal Sacrifice

HISTO: 92-63072

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Clitoral Gland		Adenoma	
		Cyst	Moderate
* Heart		Cardiomyopathy	Mild
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Minimal
* Liver		Basophilic Focus	Mild
		Clear Cell Focus	Minimal
		Eosinophilic Focus	Moderate
	Bile Duct	Hyperplasia	Minimal
[Basophilic Focus TGLS = 2-6]			
[Clear Cell Focus TGLS = 2-6]			
[Eosinophilic Focus TGLS = 2-6]			
* Lung		Infiltration Cellular	Histiocyte, Minimal
[Infiltration Cellular TGLS = 3-22]			
* Mammary Gland		Dilatation	Mild
		Fibroadenoma	
[Fibroadenoma TGLS = 1-21]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Hematopoietic Cell Proliferation	Minimal
		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 999

TRT#: 4

SEX: Female

DAY ON TEST: 753

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Clitoral Gland		Adenoma	
[Adenoma TGLS = 1-8]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Transit Epithe	Hyperplasia	Mild
		Mineralization	Mild
	Renal Tubule	Pigmentation	Mild
* Liver		Leukemia Mononuclear	
	Kupffer Cell	Pigmentation	Mild
	Hepatocyte	Vacuolization Cytoplasmic	Mild
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
		Pigmentation	Mild
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Dilatation	Moderate
[Dilatation TGLS = 2-8]			
Mesentery	Fat	Necrosis	Mild
[Necrosis TGLS = 3-21]			
* Pituitary Gland	Pars Distalis	Angiectasis	Marked
	Pars Distalis	Hyperplasia	Focal, Mild
[Angiectasis TGLS = 6-1]			
[Hyperplasia TGLS = 6-1]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 999

TRT#: 4

SEX: Female

DAY ON TEST: 753

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61429

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen [Leukemia Mononuclear TGLS = 4-6] Leukemia Mononuclear

* Thyroid Gland [Adenoma TGLS = 5-3] C Cell Adenoma

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Clitoral Gland Adenoma;Thyroid Gland C Cell Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1000

TRT#: 4

SEX: Female

DAY ON TEST: 780

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61687

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Blood Vessel | * Bone | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|--------------------------|--|---------------------------|----------------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Kidney | | Mineralization | Minimal |
| | Renal Tubule | Pigmentation | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| | Kupffer Cell | Pigmentation | Moderate |
| | Hepatocyte | Vacuolization Cytoplasmic | Moderate |
| | [Leukemia Mononuclear TGLS = 3-6] | | |
| | [Vacuolization Cytoplasmic TGLS = 3-6] | | |
| * Lung | | Infiltration Cellular | Histiocyte, Mild |
| | | Leukemia Mononuclear | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| * Mammary Gland | | Dilatation | Mild |
| * Nose | | Foreign Body | |
| | Goblet Cell | Hyperplasia | Minimal |
| | Mucosa | Hyperplasia | Minimal |
| | | Inflammation | Suppurative, Minimal |
| * Ovary | | Cyst | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1000

TRT#: 4

SEX: Female

DAY ON TEST: 780

DOSE: 0.5%

DISP: Moribund Sacrifice

HISTO: 92-61687

ORGAN AND ACCOUNTABLE SITE STATUS

* Pancreas	Leukemia Mononuclear
* Pituitary Gland	Leukemia Mononuclear
* Spleen	Leukemia Mononuclear
[Leukemia Mononuclear TGLS = 2-6]	
* Thymus	Leukemia Mononuclear
[Leukemia Mononuclear TGLS = 4-3]	

PRIMARY CAUSE OF DEATH - Liver Leukemia Mononuclear

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1001

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Parathyroid Gland

OBSERVATIONS

* Intestine Large, Rectum		Parasite Metazoan	
* Kidney		Mineralization	Mild
* Nose	Goblet Cell	Hyperplasia	Minimal
* Ovary		Cyst	
[Cyst TGLS = 1-7]			
* Spleen		Pigmentation	Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1002

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53156

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Liver
* Mammary Gland
* Parathyroid Gland
* Stomach, Forestomach
* Trachea

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Nose
* Pituitary Gland
* Stomach, Glandular
* Urinary Bladder

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Thymus
* Uterus

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thyroid Gland

OBSERVATIONS

* Kidney
* Spleen

Mineralization
Pigmentation

Mild
Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

Animal Note: AORTA IS ON SLIDE 5

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1003

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53157

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Parathyroid Gland

OBSERVATIONS

* Kidney		Mineralization	Mild
* Nose	Globet Cell	Hyperplasia	Minimal
* Spleen		Pigmentation	Hemosiderin, Minimal
* Thyroid Gland		Ectopic Thymus	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1004

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53158

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Parathyroid Gland

OBSERVATIONS

* Kidney		Mineralization	Mild
* Nose	Goblet Cell	Hyperplasia	Minimal
* Spleen		Pigmentation	Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1005

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53159

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

OBSERVATIONS

* Kidney		Mineralization	Minimal
* Liver		Hepatodiaphragmatic Nodule	
[Hepatodiaphragmatic Nodule TGLS = 2-21]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Spleen		Pigmentation	Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1006

TRT#: 4

DOSE: 0.5%

SEX: Female

DISP: Scheduled Sacrifice

DAY ON TEST: 92

HISTO: 90-53160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Clitoral Gland [Cyst TGLS = 8-1]	Cyst	Moderate
* Kidney	Mineralization	Moderate
* Liver [Hepatodiaphragmatic Nodule TGLS = 3-21]	Hepatodiaphragmatic Nodule	
* Spleen	Pigmentation	Hemosiderin, Minimal
* Thyroid Gland	Ultimobranchial Cyst	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1008

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Liver
* Mammary Gland
* Parathyroid Gland
* Stomach, Forestomach
* Trachea

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Nose
* Pituitary Gland
* Stomach, Glandular
* Urinary Bladder

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Thymus
* Uterus

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thyroid Gland

OBSERVATIONS

* Kidney
* Spleen

Mineralization
Pigmentation

Mild
Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1009

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Adrenal Medulla

* Blood Vessel

* Bone

* Bone Marrow

* Brain

* Clitoral Gland

* Esophagus

* Heart

* Intestine Large, Cecum

* Intestine Large, Colon

* Intestine Large, Rectum

* Intestine Small, Duodenum

* Intestine Small, Ileum

* Intestine Small, Jejunum

* Islets, Pancreatic

* Liver

* Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Mammary Gland

* Nose

* Pancreas

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

* Skin

* Spleen

* Stomach, Forestomach

* Stomach, Glandular

* Thymus

* Thyroid Gland

* Trachea

* Urinary Bladder

* Uterus

OBSERVATIONS

* Kidney

Mineralization

Mild

* Ovary

Cyst

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05217-04

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: t-Butylhydroquinone

CAS Number: 1948-33-0

Date Report Requested: 10/21/2014

Time Report Requested: 05:03:03

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 1010

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 0.5%

DISP: Scheduled Sacrifice

HISTO: 90-53164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Bone Marrow
* Heart
* Intestine Small, Duodenum
* Liver
* Mammary Gland
* Parathyroid Gland
* Stomach, Forestomach
* Trachea

* Adrenal Medulla
* Brain
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Nose
* Pituitary Gland
* Stomach, Glandular
* Urinary Bladder

* Blood Vessel
* Clitoral Gland
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Thymus
* Uterus

* Bone
* Esophagus
* Intestine Large, Rectum
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thyroid Gland

OBSERVATIONS

* Kidney
* Spleen

Mineralization
Pigmentation

Mild
Hemosiderin, Minimal

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE