

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

<b>C Number:</b>	C96011
<b>Lock Date:</b>	01/28/2004
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	02/06/2006

Experiment Number: 96011-05

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Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 632

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46317

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Brain		Hemorrhage	Marked
[ Hemorrhage TGLS = 7-1 ]			
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
[ Leukemia Mononuclear TGLS = 6-6 ]		Leukemia Mononuclear	
* Lung		Hemorrhage	Mild
		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-16 ]			
* Spleen		Hemorrhage	Marked
[ Hemorrhage TGLS = 5-14 ]		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Stomach, Forestomach		Hemorrhage	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
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**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
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**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 632 <b>HISTO:</b> 46317
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Epithelium	Hyperplasia Necrosis Ulcer	Minimal Mild Mild
[ Necrosis TGLS = 8-15 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Brain Hemorrhage;Pituitary Gland Adenoma;Spleen Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 714 <b>HISTO:</b> 46318
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Islets, Pancreatic	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Minimal
* Larynx		Foreign Body	Marked
* Lung	Alveolar Epith	Hyperplasia	Moderate
[ Hyperplasia TGLS = 4-5 ]			
* Nose		Inflammation	Suppurative, Mild
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH	- Skin Keratoacanthoma
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

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Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46319
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Minimal
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
		Inflammation	Chronic, Mild
* Pancreas	Acinus	Atrophy	Minimal
* Pituitary Gland		Hyperplasia	Marked
* Prostate		Inflammation	Suppurative, Mild
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 1-16 ]			
* Spleen		Leukemia Mononuclear	
* Stom Forestom			
Note: NO CORRESPONDING LESION FOR TGL 4.			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

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**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 3

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46319

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 46320
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Liver	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Nephropathy	Marked
* Mammary Gland		Galactocele	Marked
[ Galactocele TGLS = 2-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-17 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Hyperkeratosis	Moderate
[ Hyperkeratosis TGLS = 1-17 ]			
* Spleen		Fibrosis	Marked
[ Fibrosis TGLS = 5-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 6-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 4

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46320

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 622

DOSE: CONTROL

DISP: Natural Death

HISTO: 46321

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Compression	Marked
		Hemorrhage	Marked
	[ Hemorrhage TGLS = 5-1 ]		
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Congestion	Moderate
		Leukemia Mononuclear	
	Artery	Mineralization	Minimal
	[ Congestion TGLS = 2-4+5 ]		
* Nose	Glands, Olfactory Epi	Hyperplasia	Minimal
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 5

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 622

**DOSE:** CONTROL

**DISP:** Natural Death

**HISTO:** 46321

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46322
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* 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	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney		Nephropathy	Mild
* Larynx	Respirat Epith	Hyperplasia Inflammation	Mild Chronic, Moderate
* Liver		Clear Cell Focus	
* Nose	Olfactory Epi	Degeneration	Hyaline, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH -

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 694 <b>HISTO:</b> 46323
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex [ Hyperplasia TGLS = 10-7 ]		Hyperplasia	Marked
* Kidney		Nephropathy	Minimal
* Liver [ Leukemia Mononuclear TGLS = 4-6 ]		Leukemia Mononuclear	
* Lung [ Leukemia Mononuclear TGLS = 1-15 ]		Leukemia Mononuclear	
Lymph Node [ Leukemia Mononuclear TGLS = 7-16 ]	Pancreatic	Leukemia Mononuclear	
Mesentery [ Hemorrhage TGLS = 8-14 ]	Fat	Hemorrhage	Moderate
* Nose	Olfactory Epi Olfactory Epi	Degeneration Metaplasia	Hyaline, Mild Mild
* Pituitary Gland [ Adenoma TGLS = 3-10 ]		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hemorrhage Leukemia Mononuclear	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
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**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 694
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46323

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hemorrhage TGLS = 6-17 ]

[ Leukemia Mononuclear TGLS = 5,9-17+18 ]

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Adenoma;Spleen Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 296
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Natural Death	<b>HISTO:</b> 46324

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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AUTO PRECLUDES DIAG.

\* Intestine Small, Jejunum

OBSERVATIONS

* Brain		Compression	Moderate
		Hemorrhage	Marked
* Lung	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Pituitary Gland		Adenoma	
		Hemorrhage	Marked
	[ Adenoma TGLS = 1-10 ]		
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Brain Hemorrhage; Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 710

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46325

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Trachea		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Leukemia Mononuclear Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia Leukemia Mononuclear	Mild
	[ Hyperplasia TGLS = 1-4 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-14 ]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Mild
	[ Hyperplasia TGLS = 2-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 10

**TRT#:** 1  
**DOSE:** CONTROL

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46326

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney	Papilla	Mineralization Nephropathy Degeneration Leukemia Mononuclear	Minimal Mild Cystic, Minimal
* Liver			
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Nose		Inflammation	Chronic, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 11

TRT#: 1

SEX: Male

DAY ON TEST: 647

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46327

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Marked
	[ Cataract TGLS = 1-13 ]		
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-8 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-14 ]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 12

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 620

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46328

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Testes	* Thymus	* Thyroid Gland
* Trachea			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex	Hyperplasia	Mild
* Adrenal Medulla	Hyperplasia	Mild
* Kidney	Nephropathy	Moderate
[ Nephropathy TGLS = 4-7 ]		
* Liver	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung	Leukemia Mononuclear	
* Lymph Node, Bronchial	Leukemia Mononuclear	
* Lymph Node, Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-16 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 2-10 ]		
* Prostate	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-17 ]		
* Spleen	Hemorrhage	Marked
	Leukemia Mononuclear	
	Necrosis	Moderate
[ Hemorrhage TGLS = 5-14 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 12	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 620
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46328

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 6-6+14 ]		
[ Necrosis TGLS = 7-15 ]		
* Stomach, Glandular	Erosion	Minimal
[ Erosion TGLS = 10-10 ]		
* Urinary Bladder	Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Spleen	Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46329

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* 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	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney	Renal Tubule	Adenoma	
		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Lung	Alveolar Epith	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-17 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 571

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46330

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Marked
* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Moderate
	[ Cataract TGLS = 5-13 ]		
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 3-14 ]		
* Lymph Node, Bronchial		Ectasia	Marked
	[ Ectasia TGLS = 1-14 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH - Brain Compression

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46331

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Larynx		Foreign Body	Marked
	Respirat Epith	Hyperplasia	Mild
* Liver		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Foreign Body	
		Inflammation	Suppurative, Minimal
* Pancreas	Acinus	Atrophy	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14+15+16+17 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46332

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Harderian Gland		Inflammation	Chronic, Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-7 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Inflammation	Chronic, Mild
		Metaplasia	Mild
Peritoneum		Mesothelioma Malignant	
Note: small mesothelioma on epididymis slide 9			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
[ Adenoma TGLS = 4-9 ]			
[ Atrophy TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 16

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46332

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 17

TRT#: 1

SEX: Male

DAY ON TEST: 708

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46333

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Intestine Large, Colon		Diverticulum	Mild
[ Diverticulum TGLS = 5-14 ]			
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 4-7 ]			
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Mammary Gland	Epithelium	Hyperplasia	Marked
[ Hyperplasia TGLS = 1-15 ]			
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
	Nasolacrim Dct	Inflammation	Suppurative, Mild
		Inflammation	Chronic, Mild
	Olfactory Epi	Metaplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 17	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46333

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
[ Adenoma TGLS = 3-9 ]			

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PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 18

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46334

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Nephropathy	Moderate
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 2-7 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 1-9 ]			

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46335

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolar Epith	Hyperplasia	Minimal
* Nose	Goblet Cell	Hyperplasia	Minimal
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-7 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46336

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lymph Node, Mediastinal		Carcinoma	Metastatic (Thyroid Gland)
* Nose	Respirat Epith	Degeneration	Hyaline, Minimal
* Pituitary Gland		Hyperplasia	Marked
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Carcinoma	
[ Carcinoma TGLS = 2-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46337

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                   | * Bone Marrow              | * Brain                   | * Epididymis                |
| * Esophagus              | * Eye                      | * Harderian Gland         | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Mammary Gland          | * Nose                     | * Pancreas                | * Parathyroid Gland         |
| * Preputial Gland        | * Salivary Glands          | * Seminal Vesicle         | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           | * Trachea                   |
| * Urinary Bladder        |                            |                           |                             |

MISSING

- |                          |                           |
|--------------------------|---------------------------|
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
|--------------------------|---------------------------|

OBSERVATIONS

- |  |                |                           |                      |
|--|----------------|---------------------------|----------------------|
| * Adrenal Cortex                       |                | Hyperplasia               | Minimal              |
|  |                | Vacuolization Cytoplasmic | Minimal              |
| * Adrenal Medulla                      |                | Hyperplasia               | Marked               |
| * Kidney                               |                | Nephropathy               | Mild                 |
| * Liver                                |                | Leukemia Mononuclear      |                      |
| * Lung                                 | Alveolar Epith | Hyperplasia               | Mild                 |
|  | Alveolus       | Infiltration Cellular     | Histiocyte, Moderate |
| [ Infiltration Cellular TGLS = 4-4+5 ] |                |                           |                      |
| Lymph Node                             | Pancreatic     | Leukemia Mononuclear      |                      |
| [ Leukemia Mononuclear TGLS = 5-16 ]   |                |                           |                      |
| * Lymph Node, Bronchial                |                | Leukemia Mononuclear      |                      |
| [ Leukemia Mononuclear TGLS = 2-4 ]    |                |                           |                      |
| * Lymph Node, Mesenteric               |                | Leukemia Mononuclear      |                      |
| [ Leukemia Mononuclear TGLS = 9-17 ]   |                |                           |                      |
| * Pituitary Gland                      |                | Adenoma                   |                      |
| [ Adenoma TGLS = 8-10 ]                |                |                           |                      |
| * Prostate                             |                | Inflammation              | Suppurative, Mild    |
| * Skin                                 |                | Keratoacanthoma           |                      |
| [ Keratoacanthoma TGLS = 1-14 ]        |                |                           |                      |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:27

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 21

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46337

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Spleen [ Leukemia Mononuclear TGLS = 6,7-15+16 ] Leukemia Mononuclear

\* Testes [ Adenoma TGLS = 3-9 ] Interstit Cell Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 22

TRT#: 1

SEX: Male

DAY ON TEST: 599

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46338

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Epididymis		Mesothelioma Malignant	
* Intestine Small, Jejunum		Inflammation	Chronic Active, Marked
		Thrombosis	Marked
		Ulcer	Marked
[ Inflammation TGLS = 4-14+15 ]			
* Kidney		Nephropathy	Minimal
Note: NO CORRELATING LESION FOR TGL 5.			
* Liver		Necrosis	Marked
[ Necrosis TGLS = 3-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
[ Hyperplasia TGLS = 1-5 ]			
* Pituitary Gland		Hyperplasia	Marked
* Preputial Gland		Cyst	Marked
[ Cyst TGLS = 6-9 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstit Cell	Adenoma	
		Mesothelioma Malignant	
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 22	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 599 <b>HISTO:</b> 46338
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Adenoma
PRIMARY CAUSE OF DEATH	- Intestine Small, Jejunum	Ulcer
CONTRIBUTORY CAUSE OF DEATH	- Intestine Small;Jejunum	Inflammation;Intestine Small;Jejunum Thrombosis;Liver Necrosis

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 600

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46339

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Brain		Hemorrhage	Marked
[ Hemorrhage TGLS = 9,10-1+18 ]			
* Heart		Cardiomyopathy	Mild
[ Cardiomyopathy TGLS = 1-6 ]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
[ Nephropathy TGLS = 8-7 ]			
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Mild
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Pituitary Gland		Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2,3-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Stomach, Glandular		Ulcer	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 23	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 600 <b>HISTO:</b> 46339
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 11-17 ]			
* Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
[ Adenoma TGLS = 4-9 ]			
[ Atrophy TGLS = 5-9 ]			

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PRIMARY CAUSE OF DEATH	- Brain Hemorrhage
CONTRIBUTORY CAUSE OF DEATH	- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 674

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46340

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* 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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain	Compression	Moderate
* Kidney	Nephropathy	Mild
Mesentery	Necrosis	Mild
[ Necrosis TGLS = 1-14 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 3-10 ]		
* Prostate	Inflammation	Suppurative, Minimal
* Testes	Interstit Cell Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 613

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46341

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Brain		Hemorrhage	Mild
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 9-6 ]			
* Kidney		Nephropathy	Mild
* Liver		Necrosis	Marked
[ Necrosis TGLS = 6-6 ]			
* Lung	Alveolus	Hemorrhage	Mild
		Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 8-5 ]			
* Nose		Foreign Body	
		Inflammation	Suppurative, Mild
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 7-15 ]			
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[ Fibrosis TGLS = 5-16 ]			
* Stomach, Glandular		Erosion	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 25	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 613
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46341

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Erosion TGLS = 10-17 ]

\* Testes

Interstit Cell

Adenoma

[ Adenoma TGLS = 4-9 ]

PRIMARY CAUSE OF DEATH

- Liver Necrosis

CONTRIBUTORY CAUSE OF DEATH

- Heart Atrium Thrombosis;Skin Keratoacanthoma;Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 26

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46342

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Minimal
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Mixed Cell Focus	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-8 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 26	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46342

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-14 ]		
* Testes	Interstit Cell	Adenoma
[ Adenoma TGLS = 4-9 ]		
* Urinary Bladder		Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 27

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46343

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 28

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46344

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* 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		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Lens	Cataract	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Mild
* Pituitary Gland		Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 29

TRT#: 1

SEX: Male

DAY ON TEST: 467

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46345

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Marked
* Heart	Valve	Thrombosis	Marked
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-7 ]			
* Liver		Vacuolization Cytoplasmic	Marked
[ Vacuolization Cytoplasmic TGLS = 3-6 ]			
* Lymph Node, Bronchial		Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 1-4 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
[ Ulcer TGLS = 5-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Heart Valve Thrombosis; Stomach; Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 558

DOSE: CONTROL

DISP: Natural Death

HISTO: 46346

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
Blood Vessel		Mineralization	Marked
* Eye	Cornea	Inflammation	Suppurative, Mild
* Heart		Cardiomyopathy	Marked
[ Cardiomyopathy TGLS = 3-6 ]			
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Renal Tubule	Mineralization	Marked
		Nephropathy	Marked
Note: ONLY ONE SECTION OF KIDNEY AVAILABLE FOR EXAMINATION.			
[ Nephropathy TGLS = 5-7 ]			
* Larynx	Epiglottis	Hyperplasia	Minimal
	Respirat Epith	Hyperplasia	Minimal
	Epiglottis	Metaplasia	Squamous, Minimal
* Lung		Hemorrhage	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Artery	Mineralization	Marked
* Nose	Vomeronas Org	Inflammation	Suppurative, Mild
* Parathyroid Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 2-3 ]			
* Skin		Cyst Epithelial Inclusion	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 30	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 558 <b>HISTO:</b> 46346
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Cyst Epithelial Inclusion TGLS = 1-14 ]

\* Stomach, Glandular

Mineralization

Marked

\* Testes

Bilateral, Interstit Cell

Adenoma

Interstit Cell

Hyperplasia

Marked

[ Adenoma TGLS = 4-9 ]

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PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH

- Blood Vessel Mineralization;Heart Cardiomyopathy

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 31

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46347

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Nose		Inflammation	Chronic, Minimal
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	Follicular Cel	Carcinoma	
[ Carcinoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 32

TRT#: 1

SEX: Male

DAY ON TEST: 702

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46348

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex	Hyperplasia	Moderate
* Kidney	Nephropathy	Mild
* Larynx	Foreign Body	Marked
	Inflammation	Suppurative, Moderate
* Liver	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]		
* Lung	Inflammation	Chronic, Mild
	Leukemia Mononuclear	
Mesentery	Necrosis	Moderate
[ Necrosis TGLS = 6-15 ]		
* Nose	Inflammation	Suppurative, Minimal
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 3-10 ]		
* Prostate	Inflammation	Suppurative, Minimal
* Spleen	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]		
* Testes	Interstit Cell	Mild
	Hyperplasia	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 32

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 702

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46348

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46349

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 34

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* 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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Mild
* Liver	Bile Duct	Clear Cell Focus	
		Hyperplasia	Moderate
	Hepatocyte	Leukemia Mononuclear	
		Regeneration	Marked
[ Regeneration TGLS = 2-7 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 35

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46351

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 3-7 ]			
* Eye	Bilateral, Lens	Cataract	Mild
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 4-7 ]			
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolar Epith	Hyperplasia Inflammation Pheochromocytoma Malignant	Mild Chronic, Mild Metastatic (Adrenal Medulla)
[ Hyperplasia TGLS = 2-5 ]			
* Nose	Glands, Respirat Epith	Dilatation	Marked
Pleura		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 36

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46352

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Nose	Olfactory Epi	Metaplasia	Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,4-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 6-9 ]			
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 36

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46352

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 37

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46353

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Minimal
* Liver	Bile Duct	Hyperplasia	Mild
		Vacuolization Cytoplasmic	Moderate
* Prostate		Inflammation	Suppurative, Moderate
* Skin	Subcut Tiss	Fibroma	
		[ Fibroma TGLS = 1-14 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 3-9 ]	
* Thyroid Gland	Follicular Cel	Carcinoma	
		[ Carcinoma TGLS = 2-3 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 38

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46354

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Islets, Pancreatic		Adenoma	
* Kidney	Renal Tubule	Carcinoma	
		Nephropathy	Minimal
[ Carcinoma TGLS = 2-7 ]			
* Liver		Clear Cell Focus	
* Lung	Alveolar Epith	Hyperplasia	Mild
* Nose		Foreign Body	
		Inflammation	Suppurative, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 39

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46355

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex	Hyperplasia	Mild
* Kidney	Nephropathy	Moderate
* Liver	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]		
Mesentery	Necrosis	Mild
[ Necrosis TGLS = 2-16 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 1-10 ]		
* Prostate	Inflammation	Suppurative, Mild
* Spleen	Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46356

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Medulla [ Pheochromocytoma Benign TGLS = 7-7 ]		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney [ Nephropathy TGLS = 6-7 ]		Nephropathy	Marked
* Mammary Gland [ Carcinoma TGLS = 1,2-16+17 ] [ Galactocele TGLS = 2-17 ]		Carcinoma Galactocele	Multiple Marked
* Pituitary Gland [ Adenoma TGLS = 4-10 ]		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Skin [ Adenoma TGLS = 3-18 ]	Sebaceous GI	Adenoma	
* Testes [ Adenoma TGLS = 5-14 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 40

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46356

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 41

TRT#: 1

SEX: Male

DAY ON TEST: 712

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46357

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Moderate
* Heart	Atrium	Thrombosis	Moderate
	[ Thrombosis TGLS = 5-6 ]		
* Kidney		Nephropathy	Minimal
* Liver		Degeneration	Cystic, Minimal
	Bile Duct	Hepatodiaphragmatic Nodule	Marked
		Hyperplasia	Moderate
	[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Pituitary Gland		Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 41

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 712

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46357

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 42

TRT#: 1

SEX: Male

DAY ON TEST: 607

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46358

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Leukemia Mononuclear	
* Heart	Cardiomyopathy	Mild
* Kidney	Leukemia Mononuclear	
	Nephropathy	Minimal
* Liver	Leukemia Mononuclear	
	Vacuolization Cytoplasmic	Moderate
[ Leukemia Mononuclear TGLS = 5-6 ]		
* Lung	Leukemia Mononuclear	
* Lymph Node, Mediastinal	Leukemia Mononuclear	
* Lymph Node, Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-15 ]		
* Nose	Leukemia Mononuclear	
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 1-10 ]		
* Prostate	Inflammation	Suppurative, Mild
* Spleen	Hemorrhage	Marked
	Leukemia Mononuclear	
[ Hemorrhage TGLS = 4-14 ]		
[ Leukemia Mononuclear TGLS = 3-14 ]		
* Stomach, Forestomach	Epithelium	Moderate
	Hyperplasia	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 42	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 607 <b>HISTO:</b> 46358
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 7-16 ]		Ulcer	Marked
* Stomach, Glandular [ Ulcer TGLS = 8-16 ]		Ulcer	Marked
* Testes [ Adenoma TGLS = 2-9 ]	Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Moderate

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Adenoma;Spleen Hemorrhage;Stomach;Forestomach Ulcer;Stomach;Glandular Ulcer		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 43

TRT#: 1

SEX: Male

DAY ON TEST: 495

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46359

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone	Cranium	Carcinoma	Metastatic (Zymbal'S Gland)
* Eye	Cornea	Inflammation	Suppurative, Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
		Vacuolization Cytoplasmic	Mild
	[ Hepatodiaphragmatic Nodule TGLS = 3-16 ]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Suppurative, Minimal
	Artery	Thrombosis	Moderate
* Lymph Node, Mediastinal		Hyperplasia	Lymphoid, Marked
		Inflammation	Suppurative, Marked
	[ Hyperplasia TGLS = 4-3 ]		
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Intermed	Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Stomach, Glandular		Ulcer	Moderate
	[ Ulcer TGLS = 5-16 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:27

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 43

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 495

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46359

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Germinal Epith	Atrophy	Marked
	Interstit Cell	Hyperplasia	Minimal
[ Atrophy TGLS = 2-9 ]			
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 1-14+15 ]			

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**PRIMARY CAUSE OF DEATH** - Zymbal's Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 562

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46360

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Marked
* Kidney		Nephropathy	Minimal
* Liver		Vacuolization Cytoplasmic	Mild
* Lung	Alveolar Epith	Hyperplasia	Minimal
Mesentery		Necrosis	Mild
[ Necrosis TGLS = 4-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
Note: No corresponding lesion to TGL 5 on slide 14.			
* Testes	Interstit Cell	Hyperplasia	Minimal
* Urinary Bladder	Transit Epithe	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 45

TRT#: 1

SEX: Male

DAY ON TEST: 628

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46361

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Moderate
* Liver		Basophilic Focus	
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Degeneration	Hyaline, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:27

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 46

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46362

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Heart	Pericardium	Carcinoma	Metastatic (Lung)
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lung	Alveolar Epith	Alveolar/Bronchiolar Carcinoma	Multiple
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1-14, 4-5 ]	Hyperplasia	Marked
	[ Hyperplasia TGLS = 4-5 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 5-10 ]		
Pleura	Mesothelium	Hyperplasia	Marked
Skeletal Muscle		Carcinoma	Metastatic (Lung)
	[ Carcinoma TGLS = 2,3-15+16 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 6-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 47

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46363

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart	Valve	Cardiomyopathy	Moderate
* Kidney		Nephropathy	Marked
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 8-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,4-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:27  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 47

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46363

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 7-9 ]

\* Urinary Bladder

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:27

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 48

TRT#: 1

SEX: Male

DAY ON TEST: 719

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46364

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* 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	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Hyperplasia	Moderate
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 3-6 ]			
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
		Nephropathy	Moderate
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Minimal
* Liver		Leukemia Mononuclear	
		Necrosis	Marked
* Lung		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Marked
[ Inflammation TGLS = 4-10 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Adenoma TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 48

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 719

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46364

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Heart Atrium Thrombosis

CONTRIBUTORY CAUSE OF DEATH

- Liver Necrosis;Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 49

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 689

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46365

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Bronchial

**OBSERVATIONS**

* Adrenal Cortex	Hyperplasia	Marked
* Islets, Pancreatic	Carcinoma	
* Kidney	Leukemia Mononuclear	
	Lipoma	
	Nephropathy	Moderate
[ Lipoma TGLS = 8-18 ]		
* Liver	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]		
* Lymph Node, Mandibular	Ectasia	Marked
	Metaplasia	Osseous, Moderate
[ Ectasia TGLS = 1-16 ]		
[ Metaplasia TGLS = 1-16 ]		
* Lymph Node, Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]		
* Nose	Leukemia Mononuclear	
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 4-10 ]		
* Prostate	Inflammation	Suppurative, Moderate
* Skin	Keratoacanthoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 49	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 689
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46365

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Keratoacanthoma TGLS = 2-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 7-9 ]			

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PRIMARY CAUSE OF DEATH	- Pituitary Gland	Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46366

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Nose		Foreign Body	
		Inflammation	Suppurative, Minimal
* Pituitary Gland	Olfactory Epi	Metaplasia	Minimal
		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 201

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46617

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart	Atrium	Thrombosis	Marked
* Islets, Pancreatic		Adenoma	
* Kidney	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 5-6 ]	
		[ Leukemia Mononuclear TGLS = 6-6,10-15 ]	
* Lung	Interstitium	Fibrosis	Mild
		Hemorrhage	Mild
		Leukemia Mononuclear	
		[ Fibrosis TGLS = 8-5 ]	
		[ Hemorrhage TGLS = 9-14 ]	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 201	<b>TRT#:</b> 3 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46617
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 7-17 ]			
* Nose	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear Necrosis	Marked
[ Leukemia Mononuclear TGLS = 3-16 ]			
[ Necrosis TGLS = 4-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-9 ]			

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 202

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 669

HISTO: 46618

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Hyperplasia TGLS = 6-5 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-10 ]			
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-15 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 202	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 669
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46618

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]

\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear;Stomach;Forestomach Epithelium Hyperplasia

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 203

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46619

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Compression	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Moderate Marked
* Liver		Basophilic Focus Leukemia Mononuclear	
* Lung		Alveolar/Bronchiolar Adenoma Leukemia Mononuclear	
	[ Alveolar/Bronchiolar Adenoma TGLS = 3-5 ]		
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Nose	Olfactory Epi Glands, Respirat Epith Epithelium, Nasolacrim Dct	Degeneration Dilatation Metaplasia Adenoma	Hyaline, Mild Moderate Squamous, Mild
* Pituitary Gland			
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 203	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46619

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
[ Adenoma TGLS = 2-9 ]			

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 204

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46620

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
	Atrium	Thrombosis	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Moderate
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 205

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46621

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]		
* Lymph Node, Mediastinal		Carcinoma	Metastatic (Thyroid Gland)
* Nose	Epithelium, Nasolacrim Dct	Metaplasia	Squamous, Mild
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2-9 ]		
* Thyroid Gland	C Cell	Carcinoma	
	[ Carcinoma TGLS = 1-3 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 206

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46622

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign Pheochromocytoma Malignant	
* Heart	Atrium	Thrombosis	Minimal
* Kidney	Renal Tubule	Cyst Nephropathy	Marked
[ Cyst TGLS = 4-7 ]			
* Liver		Eosinophilic Focus	
* Lung	Bronchiole Alveolus	Hyperplasia Infiltration Cellular Inflammation	Mild Histiocyte, Mild Chronic, Mild
[ Infiltration Cellular TGLS = 5-16 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Pituitary Gland		Hyperplasia	Mild
Pleura		Inflammation	Chronic, Mild
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-15 ]			
* Testes	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 206

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46622

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]	Interstit Cell	Hyperplasia	Minimal
[ Atrophy TGLS = 3-9 ]			

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 207

TRT#: 3

SEX: Male

DAY ON TEST: 519

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46623

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Skin	* Thymus	* Thyroid Gland	* Trachea

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

Blood Vessel		Leukemia Mononuclear	Metastatic (Spleen)
Note: Heart valve and vessel wall in mesentery adjacent to spleen in slide 6 are infiltrated with lymphocytes. Atypical COD for MCL.			
* Bone Marrow		Leukemia Mononuclear	
* Heart		Leukemia Mononuclear	
* Intestine Large, Cecum		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-8 ]			
* Intestine Large, Colon		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-8 ]			
* Intestine Large, Rectum		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-8 ]			
* Intestine Small, Duodenum		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-8 ]			
* Intestine Small, Ileum		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-8 ]			
* Intestine Small, Jejunum		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-8 ]			
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 207

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 519

HISTO: 46623

ORGAN AND ACCOUNTABLE SITE STATUS

* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Olfactory Epi	Metaplasia	Minimal
* Prostate		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Seminal Vesicle		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Stomach, Glandular		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Marked
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Heart Leukemia Mononuclear;Mesentery Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 208

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46624

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 4-7 ]			
* Liver		Angiectasis	Mild
[ Angiectasis TGLS = 6-6 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 7-14 ]			
* Nose	Respirat Epith Nasolacrim Dct	Hyperplasia Inflammation Adenoma	Mild Suppurative, Mild
* Pituitary Gland			
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 209

TRT#: 3

SEX: Male

DAY ON TEST: 670

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46625

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Brain		Compression	Mild
* Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
		[ Adenoma TGLS = 5-17 ]	
		[ Nephropathy TGLS = 3-7 ]	
* Liver		Hepatodiaphragmatic Nodule	Marked
		[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]	
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 1-10 ]	
* Prostate		Inflammation	Suppurative, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
		[ Ulcer TGLS = 4-15 ]	
* Testes	Interstit Cell	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer  
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 209

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 670

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46625

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 210

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46626

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Islets, Pancreatic [ Adenoma TGLS = 10-16 ]		Adenoma	
* Kidney		Nephropathy	Moderate
* Larynx	Respirat Epith	Foreign Body	Marked
		Hyperplasia	Minimal
		Inflammation	Suppurative, Minimal
* Liver		Necrosis	Mild
Lymph Node [ Ectasia TGLS = 6-15 ]	Deep Cervical	Ectasia	Marked
* Lymph Node, Bronchial [ Ectasia TGLS = 3-4 ]		Ectasia	Marked
* Lymph Node, Mandibular [ Ectasia TGLS = 1-18 ]		Ectasia	Marked
Mesentery [ Necrosis TGLS = 2-14 ]		Necrosis	Moderate
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Minimal
* Pituitary Gland [ Hyperplasia TGLS = 9-10 ]		Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 210	<b>TRT#:</b> 3 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46626
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Mild
* Seminal Vesicle		Dilatation	Marked
		Hyperplasia	Moderate
[ Dilatation TGLS = 8-20 ]			
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 7-9 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 4-3 ]			
Tongue		Papilloma	
[ Papilloma TGLS = 5-17 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 211

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46627

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* 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

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Eye	Lens	Cataract	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Mild
[ Necrosis TGLS = 2-14 ]			
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
[ Adenoma TGLS = 3-16 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 212

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46628

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 213

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46629

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* 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	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Infarct	Multiple, Marked
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Infarct TGLS = 5,6-7+17 ]			
* Larynx		Inflammation	Suppurative, Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Hemorrhage	Marked
[ Hemorrhage TGLS = 10-14 ]			
Mesentery		Hemorrhage	Mild
[ Hemorrhage TGLS = 9-15 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 213	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46629

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3,4-18+19 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 8-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-16 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 214

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 674

HISTO: 46630

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* 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

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Granular Cell Tumor Malignant	
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 3-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Brain Granular Cell Tumor Malignant

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 215

TRT#: 3

SEX: Male

DAY ON TEST: 596

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46631

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 5-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Marked
[ Inflammation TGLS = 7-14 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 6-9 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 215

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 596  
**HISTO:** 46631

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**CONTRIBUTORY CAUSE OF DEATH** - Brain Compression;Spleen Leukemia Mononuclear;Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 216

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 589

HISTO: 46632

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Brain		Hemorrhage	Mild
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Hyperplasia TGLS = 5-15 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 3,4-14+15 ]			
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Marked
[ Ulcer TGLS = 6-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 216

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 589

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46632

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Hyperplasia	Mild
* Thyroid Gland	C Cell	Adenoma	
* Urin Bladder			

Note: "calculus" is dessicated seminal plug in bladder lumen.

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma;Spleen Hemorrhage;Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 217

TRT#: 3

SEX: Male

DAY ON TEST: 618

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46633

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Thyroid Gland	Ureter	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Renal Tubule	Hyperplasia	Marked
	Papilla	Mineralization	Minimal
		Nephropathy	Marked
	[ Nephropathy TGLS = 4-7 ]		
* Liver		Fatty Change	Diffuse, Moderate
* Lung			
	Note: tgl 5 is dilated centriacinar areas, but not clearly emphysematous change because no clear fragmentation or destruction of septa.		
	Note: NO CORRELATING LESION FOR TGL 5.		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
	[ Inflammation TGLS = 6-14 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstitial Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 217	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 618
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46633

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]

[ Atrophy TGLS = 2-9 ]

* Trachea	Glands	Cyst	Moderate
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PRIMARY CAUSE OF DEATH	- Kidney Nephropathy
CONTRIBUTORY CAUSE OF DEATH	- Heart Cardiomyopathy; Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 218

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46634

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Hemorrhage	Mild
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-16 ]			
* Nose	Respirat Epith	Adenoma	
	Goblet Cell	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Lipoma	
[ Lipoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
		Necrosis	Moderate
[ Necrosis TGLS = 3-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 218

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 46634

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 4-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 219

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46635

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Hemorrhage	Mild
	Alveolar Epith	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
	Olfactory Epi	Metaplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Skin	Subcut Tiss	Fibroma	
		Keratoacanthoma	
[ Fibroma TGLS = 3-16+17 ]			
[ Keratoacanthoma TGLS = 1,2-14+15 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 219	<b>TRT#:</b> 3 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46635
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 5,6-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	Follicular Cel	Cyst	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 220

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 445  
**HISTO:** 46636

**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	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	Skeletal Muscle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Eye		Carcinoma Degeneration Inflammation	Metastatic (Harderian Gland) Marked Chronic Active, Marked
[ Carcinoma TGLS = 2-13 ]			
[ Inflammation TGLS = 2-13 ]			
* Harderian Gland		Carcinoma	
[ Carcinoma TGLS = 1-13 ]			
* Kidney		Nephropathy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Nose	Goblet Cell	Hyperplasia Inflammation	Mild Suppurative, Minimal
* Pituitary Gland		Hyperplasia	Moderate
* Skin	Subcut Tiss	Carcinoma	Metastatic (Harderian Gland)
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

CONTRIBUTORY CAUSE OF DEATH

- Eye Carcinoma Harderian Gland;Harderian Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 221

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46637

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Renal Tubule Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy Clear Cell Focus	Mild Mild Moderate Moderate
* Liver	Bile Duct	Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear	Marked Mild
	[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]		
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Nose	Olfactory Epi Respirat Epith Olfactory Epi	Hyperplasia Hyperplasia Metaplasia Adenoma	Basal Cell, Mild Mild Mild
* Pituitary Gland			
	[ Adenoma TGLS = 5-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 221	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46637

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 1-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 222

TRT#: 3

SEX: Male

DAY ON TEST: 632

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46638

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Marked Minimal Marked
	[ Nephropathy TGLS = 2-7 ]		
* Liver		Vacuolization Cytoplasmic	Moderate
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 223

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46639

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
* Lung	Bronchiole	Inflammation	Chronic, Mild
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas	Acinus	Atrophy	Mild
* Pituitary Gland		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
		Keratoacanthoma	Multiple
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstit Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 223

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46639

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Marked

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 224

TRT#: 3

SEX: Male

DAY ON TEST: 565

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46640

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Leukemia Mononuclear	
* Brain		Compression	Marked
		Hemorrhage	Minimal
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Leukemia Mononuclear	
		Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-14 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 225

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 683

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46641

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* 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
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Kidney	Papilla	Leukemia Mononuclear Mineralization Nephropathy Inflammation	Minimal Mild Suppurative, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia Leukemia Mononuclear	Minimal
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-8 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Nose	Glands, Respirat Epith Olfactory Epi	Dilatation Hyperplasia	Moderate Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
* Spleen		Fibrosis Leukemia Mononuclear	Marked
[ Fibrosis TGLS = 5-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 225	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 683
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46641

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3-15 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 1-9 ]			
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 226

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 46642

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 3-7 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-15 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 4-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 226

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 46642

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 227

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46643

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* 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	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
		Hyperplasia	Moderate
* Brain		Compression	Moderate
* Kidney		Leukemia Mononuclear	
		Nephropathy	Marked
	[ Nephropathy TGLS = 5-7 ]		
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-14 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 6-15 ]		
* Nose	Glands, Respirat Epith	Dilatation	Moderate
* Parathyroid Gland		Hyperplasia	Marked
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 227	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46643

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
	[ Hemorrhage TGLS = 8-16 ]		
	[ Leukemia Mononuclear TGLS = 7-16+17 ]		
* Testes	Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 228

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46644

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
* Pancreas	Acinus	Atrophy	Marked
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 229

TRT#: 3

SEX: Male

DAY ON TEST: 575

DOSE: 250 PPM

DISP: Natural Death

HISTO: 46645

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Moderate
* Kidney	Atrium Papilla	Thrombosis	Marked
* Liver		Mineralization	Mild
* Lung		Nephropathy	Mild
Peritoneum		Necrosis	Marked
[ Mesothelioma Malignant TGLS = 3,4,5,7-14+15+9+16 ]		Hemorrhage	Mild
* Pituitary Gland		Mesothelioma Malignant	
* Prostate		Hyperplasia	Minimal
* Stomach, Forestomach	Epithelium	Inflammation	Suppurative, Minimal
[ Ulcer TGLS = 8-18 ]		Hyperplasia	Minimal
* Stomach, Glandular		Ulcer	Marked
[ Erosion TGLS = 8-18 ]			
* Testes	Bilateral, Interstit Cell	Erosion	Moderate
[ Adenoma TGLS = 5-9 ]		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 229

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 575  
**HISTO:** 46645

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH - Peritoneum Mesothelioma Malignant  
CONTRIBUTORY CAUSE OF DEATH - Heart Atrium Thrombosis

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 230

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46646

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney	Renal Tubule Pelvis, Transit Epithe Papilla	Adenoma Hyperplasia Mineralization Nephropathy	Minimal Minimal Moderate
[ Adenoma TGLS = 2-7 ]			
* Liver	Bile Duct	Clear Cell Focus Hyperplasia Leukemia Mononuclear	Mild
* Nose	Olfactory Epi Olfactory Epi	Degeneration Hyperplasia Adenoma	Hyaline, Mild Basal Cell, Minimal
* Pituitary Gland			
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 231

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46647

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Marked
* Adrenal Medulla		Hyperplasia	Marked
* Brain		Compression	Minimal
* Kidney	Renal Tubule	Carcinoma	
	Papilla	Mineralization	Minimal
		Nephropathy	Marked
[ Carcinoma TGLS = 5-7 ]			
* Liver		Degeneration	Cystic, Moderate
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 3-16 ]			
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 231	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46647

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 6-10 ]		Adenoma	
* Prostate		Hyperplasia Inflammation	Mild Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 232

TRT#: 3

SEX: Male

DAY ON TEST: 528

DOSE: 250 PPM

DISP: Natural Death

HISTO: 46648

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex  
\* Epididymis  
\* Heart  
\* Intestine Small, Duodenum  
\* Lymph Node, Bronchial  
\* Parathyroid Gland  
\* Skin  
\* Thyroid Gland

\* Adrenal Medulla  
\* Esophagus  
\* Intestine Large, Cecum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Preputial Gland  
\* Stomach, Forestomach  
\* Trachea

\* Bone  
\* Eye  
\* Intestine Large, Colon  
\* Liver  
\* Mammary Gland  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone Marrow  
\* Harderian Gland  
\* Intestine Large, Rectum  
\* Lung  
\* Pancreas  
\* Seminal Vesicle  
\* Testes

MISSING

\* Lymph Node, Mandibular

\* Lymph Node, Mediastinal

\* Thymus

AUTO PRECLUDES DIAG.

\* Intestine Small, Ileum

\* Intestine Small, Jejunum

OBSERVATIONS

\* Brain  
  
\* Kidney  
  
\* Larynx  
  
Mesentery  
[ Necrosis TGLS = 3-15 ]  
  
\* Nose  
  
\* Pituitary Gland  
[ Adenoma TGLS = 2-10 ]  
  
\* Prostate  
  
\* Spleen

Papilla  
  
  
  
  
  
  
Goblet Cell  
Olfactory Epi

Compression  
Hemorrhage  
Mineralization  
Nephropathy  
Foreign Body  
Inflammation  
Necrosis  
  
Foreign Body  
Hyperplasia  
Hyperplasia  
Inflammation  
Adenoma  
  
Inflammation  
Leukemia Mononuclear

Marked  
Marked  
Mild  
Mild  
Minimal  
Suppurative, Minimal  
Moderate  
  
Moderate  
Basal Cell, Minimal  
Suppurative, Moderate  
  
Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 232

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 528

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46648

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 233

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 618

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46649

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 4-16 ]			
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pancreas		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 233	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 618
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46649

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 6-15 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear	

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 234

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 643

HISTO: 46650

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
* Brain		Hemorrhage Necrosis Thrombosis	Moderate Mild Mild
* Harderian Gland		Inflammation	Suppurative, Moderate
* Heart		Cardiomyopathy	Marked
	Atrium	Thrombosis	Marked
	[ Thrombosis TGLS = 4-6 ]		
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney		Infarct	Marked
	Glomerulus	Inflammation Nephropathy	Suppurative, Marked Moderate
	[ Nephropathy TGLS = 9-7 ]		
* Larynx	Respirat Epith	Hyperplasia Inflammation	Mild Suppurative, Mild
* Liver		Inflammation Vacuolization Cytoplasmic	Suppurative, Marked Moderate
* Lung		Hemorrhage Inflammation	Mild Suppurative, Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 234	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 643
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46650

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hemorrhage TGLS = 5-4+5 ]			
[ Inflammation TGLS = 5-4+5 ]			
* Lymph Node, Mandibular		Ectasia	Marked
* Nose	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Cyst	Moderate
[ Cyst TGLS = 6-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Necrosis	Marked
[ Necrosis TGLS = 7,8-6 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
Tongue	Epithelium	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-14 ]			

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PRIMARY CAUSE OF DEATH	- Heart Atrium Thrombosis
CONTRIBUTORY CAUSE OF DEATH	- Kidney Infarct;Kidney Glomerulus Inflammation;Spleen Necrosis

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 235

TRT#: 3

SEX: Male

DAY ON TEST: 536

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46651

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
		Hemorrhage	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Inflammation	Suppurative, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
* Lymph Node, Mediastinal		Hemorrhage	Mild
* Pancreas		Vacuolization Cytoplasmic	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
* Urinary Bladder		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 236

TRT#: 3

SEX: Male

DAY ON TEST: 613

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46652

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                            |                           |                             |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla         | * Bone                     | * Bone Marrow             | * Epididymis                |
| * Esophagus               | * Eye                      | * Harderian Gland         | * Heart                     |
| * Intestine Large, Cecum  | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum  | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Lymph Node, Mediastinal | * Mammary Gland            | * Pancreas                | * Parathyroid Gland         |
| * Preputial Gland         | * Prostate                 | * Salivary Glands         | * Seminal Vesicle           |
| * Skin                    | * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             |
| * Trachea                 |                            |                           |                             |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                                      |             |                           |                     |
|--------------------------------------|-------------|---------------------------|---------------------|
| * Adrenal Cortex                     |             | Vacuolization Cytoplasmic | Mild                |
| * Brain                              |             | Hemorrhage                | Moderate            |
| [ Hemorrhage TGLS = 10-1 ]           |             |                           |                     |
| * Kidney                             |             | Leukemia Mononuclear      |                     |
|                                      | Papilla     | Mineralization            | Minimal             |
| * Liver                              |             | Leukemia Mononuclear      |                     |
|                                      |             | Necrosis                  | Mild                |
| [ Leukemia Mononuclear TGLS = 4-6 ]  |             |                           |                     |
| * Lung                               | Alveolus    | Infiltration Cellular     | Histiocyte, Minimal |
|                                      |             | Leukemia Mononuclear      |                     |
| Lymph Node                           | Pancreatic  | Leukemia Mononuclear      |                     |
| [ Leukemia Mononuclear TGLS = 7-15 ] |             |                           |                     |
| * Lymph Node, Bronchial              |             | Leukemia Mononuclear      |                     |
| * Lymph Node, Mesenteric             |             | Hemorrhage                | Moderate            |
|                                      |             | Leukemia Mononuclear      |                     |
| [ Hemorrhage TGLS = 9-16 ]           |             |                           |                     |
| [ Leukemia Mononuclear TGLS = 9-16 ] |             |                           |                     |
| * Nose                               |             | Foreign Body              |                     |
|                                      | Goblet Cell | Hyperplasia               | Mild                |

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 236

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 613

HISTO: 46652

ORGAN AND ACCOUNTABLE SITE STATUS

* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Olfactory Epi	Hyperplasia Adenoma	Basal Cell, Minimal
* Spleen [ Hemorrhage TGLS = 3-14 ] [ Leukemia Mononuclear TGLS = 2-14 ]		Hemorrhage Leukemia Mononuclear	Marked
* Stomach, Forestomach [ Ulcer TGLS = 6-10 ]	Epithelium	Hyperplasia Ulcer	Marked Marked
* Testes [ Adenoma TGLS = 5-9 ] [ Atrophy TGLS = 8-9 ]	Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Adenoma;Spleen Hemorrhage;Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 237

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46653

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Moderate
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]		
* Nose	Respirat Epith	Degeneration	Hyaline, Minimal
	Respirat Epith	Hyperplasia	Mild
* Preputial Gland		Carcinoma	
	[ Carcinoma TGLS = 1-15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 238

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 665

HISTO: 46654

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Adenoma	
		Hyperplasia	Moderate
* Adrenal Medulla		Hyperplasia	Moderate
* Heart	Atrium	Thrombosis	Moderate
[ Thrombosis TGLS = 2-14 ]			
* Kidney	Renal Tubule	Adenoma	
	Bilateral	Infarct	Moderate
		Leukemia Mononuclear	
	Papilla	Mineralization	Mild
		Nephropathy	Mild
Note: nodule of tubular epith outside renal parenchyma, cellular features identical to other renal tumors observed. dx adenoma ??? rar			
[ Infarct TGLS = 8-7 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung		Hemorrhage	Moderate
	Alveolar Epith	Hyperplasia	Minimal
		Thrombosis	Mild
[ Hemorrhage TGLS = 1-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 238	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 665
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46654

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 10-16 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-3 ]			
* Nose	Goblet Cell	Hyperplasia	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
		Leukemia Mononuclear	
* Pituitary Gland		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Urinary Bladder		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Kidney Bilateral Infarct

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 239

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 686

HISTO: 46655

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
[ Compression TGLS = 2-1 ]			
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Minimal
* Thyroid Gland	Follicular Cel	Adenoma	
[ Adenoma TGLS = 3-3 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 240

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 541

HISTO: 46656

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Minimal
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 5-10 ]	Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-14 ]		
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
	[ Adenoma TGLS = 3-9 ]		
* Thyroid Gland	C Cell	Carcinoma	
	[ Carcinoma TGLS = 1-3 ]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 241

TRT#: 3

SEX: Male

DAY ON TEST: 480

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46657

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* 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	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Mild
* Esophagus		Foreign Body	Marked
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Germinal Epith	Atrophy	Moderate

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 242

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 705

HISTO: 46658

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Colon	* Intestine Large, Rectum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Eye		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Pituitary Gland		Hemorrhage	Marked
		Leukemia Mononuclear	
	[ Hemorrhage TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Leukemia Mononuclear	
		Ulcer	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-9 ]		
* Thyroid Gland	C Cell	Adenoma	
	[ Adenoma TGLS = 2-3 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 242

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 705

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46658

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 243

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46659

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Adrenal Medulla		Pheochromocytoma Benign	
* Eye	Bilateral, Retina	Atrophy	Mild
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 1,2-13 ]			
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Carcinoma	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Inflammation	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Nose	Respirat Epith	Adenoma	Multiple
	Respirat Epith	Hyperplasia	Mild
	Olfactory Epi	Necrosis	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 243

**TRT#:** 3  
**DOSE:** 250 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46659

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]	Interstit Cell	Hyperplasia	Mild
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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 244

TRT#: 3

SEX: Male

DAY ON TEST: 624

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46660

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* 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		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Skeletal Muscle		Rhabdomyosarcoma	
Note: diff dx other spindle cell sarcomas			
[ Rhabdomyosarcoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

- Skeletal Muscle Rhabdomyosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 245

TRT#: 3

SEX: Male

DAY ON TEST: 565

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46661

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Hemorrhage	Moderate
		Leukemia Mononuclear	
		[ Hemorrhage TGLS = 1,4-4+14 ]	
		[ Leukemia Mononuclear TGLS = 1,4-4+14 ]	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Chronic, Minimal
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 2-10 ]	
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 3-15 ]	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 246

TRT#: 3

SEX: Male

DAY ON TEST: 711

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46662

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Marked
* Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
		[ Nephropathy TGLS = 4-7 ]	
* Liver		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 3-6 ]	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose	Respirat Epith	Adenoma	
	Goblet Cell	Hyperplasia	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 2-10 ]	
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 246	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 711
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46662

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Fibroma TGLS = 6-15 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia Ulcer	Marked Marked
[ Ulcer TGLS = 5-10 ]			
* Testes	Interstit Cell Artery	Hyperplasia Inflammation	Mild Chronic Active, Moderate
* Thyroid Gland	C Cell C Cell	Adenoma Hyperplasia	 Mild

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PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 247

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 674

HISTO: 46663

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 9-7 ]			
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 10-18 ]			
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith	Carcinoma	Metastatic (Skin)
		Hyperplasia	Minimal
[ Carcinoma TGLS = 7-4+5+16 ]			
Lymph Node	Deep Cervical	Carcinoma	Metastatic (Skin)
[ Carcinoma TGLS = 5-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-4 ]			
* Nose	Goblet Cell	Hyperplasia	Minimal
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 8,10-9+18 ]			
* Pituitary Gland		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 247	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 674
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46663

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-10 ]		
* Skin	Sebaceous Gl	Carcinoma
[ Carcinoma TGLS = 1-14 ]		
* Spleen		Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 3-17 ]		
* Testes	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant
[ Mesothelioma Malignant TGLS = 8-9 ]		

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PRIMARY CAUSE OF DEATH	- Skin Sebaceous Gl Carcinoma
CONTRIBUTORY CAUSE OF DEATH	- Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 248

TRT#: 3

DOSE: 250 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 639

HISTO: 46664

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-6 ]			
* Lung		Hemorrhage	Marked
[ Hemorrhage TGLS = 2-4+5+14 ]		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-17 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith	Adenoma	
		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 248	<b>TRT#:</b> 3 <b>DOSE:</b> 250 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 639 <b>HISTO:</b> 46664
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Preputial Gland [ Carcinoma TGLS = 4-16 ]		Carcinoma	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen  [ Hemorrhage TGLS = 7-15 ] [ Leukemia Mononuclear TGLS = 6-15 ]		Hemorrhage Leukemia Mononuclear	Marked
* Testes  [ Adenoma TGLS = 5-9 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Mild

---

PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Lung Hemorrhage; Pituitary Gland Adenoma; Spleen Hemorrhage

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 249

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46665

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Marked
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 250

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46666

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Harderian Gland		Inflammation	Chronic, Moderate
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Moderate
* Lung	Alveolus	Foreign Body	Mild
		Inflammation	Granulomatous, Minimal
* Lymph Node, Bronchial		Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 1-4 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Tooth		Inflammation	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 401

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 495

HISTO: 46517

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* 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		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Brain		Hemorrhage	Minimal
* Heart		Cardiomyopathy	Mild
	Valve	Hemorrhage	Mild
* Kidney		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Hemorrhage	Mild
[ Hemorrhage TGLS = 1-4+5 ]		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Testes	Interstit Cell	Hyperplasia	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 402

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 625

HISTO: 46518

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Renal Tubule Papilla	Cyst Mineralization Nephropathy	Minimal Minimal
* Larynx		Inflammation	Suppurative, Minimal
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Hemorrhage Inflammation Leukemia Mononuclear	Mild Chronic, Minimal
[ Leukemia Mononuclear TGLS = 6-4+5 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas	Acinus	Hyperplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2,3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 402	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 625
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46518

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
[ Adenoma TGLS = 1-9 ]			

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 403

TRT#: 5

SEX: Male

DAY ON TEST: 634

DOSE: 500 PPM

DISP: Natural Death

HISTO: 46519

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                          |                           |                             |
|--------------------------|--------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla        | * Bone                    | * Bone Marrow               |
| * Brain                  | * Esophagus              | * Eye                     | * Harderian Gland           |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Islets, Pancreatic     | * Larynx                 | * Lung                    | * Lymph Node, Mediastinal   |
| * Lymph Node, Mesenteric | * Mammary Gland          | * Pancreas                | * Parathyroid Gland         |
| * Pituitary Gland        | * Preputial Gland        | * Prostate                | * Salivary Glands           |
| * Seminal Vesicle        | * Skin                   | * Spleen                  | * Stomach, Forestomach      |
| * Thymus                 | * Thyroid Gland          | * Trachea                 |                             |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

AUTO PRECLUDES DIAG.

- |                          |                            |
|--------------------------|----------------------------|
| * Intestine Small, Ileum | * Intestine Small, Jejunum |
|--------------------------|----------------------------|

OBSERVATIONS

- |   |                           |   |                      |
|---|---------------------------|---|----------------------|
| * Epididymis  |                           | Mesothelioma Malignant                                  |                      |
| * Heart   |                           | Cardiomyopathy  | Mild                 |
| * Kidney  | Papilla                   | Mineralization  | Moderate             |
|   |                           | Nephropathy   | Moderate             |
| Note: pigment in cortical tubules is related to mesothelioma, not hyaline droplets related to alpha2 globulin |                           |   |                      |
| * Liver   |                           | Necrosis  | Moderate             |
|   |                           | [ Necrosis TGLS = 4-6 ]                                 |                      |
| * Nose  | Olfactory Epi             | Hyperplasia   | Basal Cell, Minimal  |
|   | Respirat Epith            | Hyperplasia   | Moderate             |
|   |                           | Inflammation  | Suppurative, Minimal |
| Peritoneum  |                           | Mesothelioma Malignant                                  |                      |
|   |                           | [ Mesothelioma Malignant TGLS = 2,5,6,7,8-16+15+17+14 ] |                      |
| * Stomach, Glandular  |                           | Erosion   | Moderate             |
|   |                           | [ Erosion TGLS = 9-16 ]                                 |                      |
| * Testes  | Bilateral, Interstit Cell | Adenoma   |                      |
|   |                           | Mesothelioma Malignant                                  |                      |
|   |                           | [ Adenoma TGLS = 3-9 ]                                  |                      |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

---

**ANIMAL ID:** 403

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 634  
**HISTO:** 46519

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Urinary Bladder

Mesothelioma Malignant

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PRIMARY CAUSE OF DEATH

- Peritoneum Mesothelioma Malignant

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 404

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46520

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                           |                                     |  |                                       |
|---------------------------|-------------------------------------|--|---------------------------------------|
| * Adrenal Medulla         |                                     | Hyperplasia  | Mild                                  |
| * Heart                   |                                     | Cardiomyopathy   | Minimal                               |
| * Kidney                  | Pelvis, Transit Epithe<br>Papilla   | Hyperplasia<br>Mineralization<br>Nephropathy   | Moderate<br>Mild<br>Marked            |
|                           | [ Nephropathy TGLS = 5-7 ]          |  |                                       |
| * Liver                   |                                     | Leukemia Mononuclear   |                                       |
|                           | [ Leukemia Mononuclear TGLS = 6-6 ] |  |                                       |
| * Lung                    | Alveolus                            | Infiltration Cellular<br>Inflammation<br>Leukemia Mononuclear<br>Leukemia Mononuclear<br>Leukemia Mononuclear<br>Adenoma | Histiocyte, Moderate<br>Chronic, Mild |
| * Lymph Node, Bronchial   |                                     |  |                                       |
| * Lymph Node, Mediastinal |                                     |  |                                       |
| * Pituitary Gland         |                                     |  |                                       |
|                           | [ Adenoma TGLS = 2-10 ]             |  |                                       |
| * Prostate                |                                     | Inflammation   | Suppurative, Mild                     |
| * Skin                    |                                     | Keratoacanthoma  |                                       |
|                           | [ Keratoacanthoma TGLS = 1-14 ]     |  |                                       |
| * Spleen                  |                                     | Leukemia Mononuclear   |                                       |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

---

**ANIMAL ID:** 404

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46520

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes  
[ Adenoma TGLS = 3,4-9+15 ]

Bilateral, Interstit Cell

Adenoma

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 405

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46521

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Renal Tubule Papilla	Hyperplasia Mineralization Inflammation Basophilic Focus Clear Cell Focus	Mild Minimal Chronic, Moderate
* Larynx			
* Liver			
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Nose	Respirat Epith Glands, Respirat Epith Goblet Cell Olfactory Epi	Adenoma Hyperplasia Hyperplasia Hyperplasia	Moderate Mild Basal Cell, Minimal
* Pituitary Gland		Adenoma	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-14+15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 406

TRT#: 5

SEX: Male

DAY ON TEST: 670

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46522

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Mild Marked
[ Nephropathy TGLS = 5-7 ]			
* Liver		Basophilic Focus Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Alveolar/Bronchiolar Adenoma Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Nose	Respirat Epith Olfactory Epi Respirat Epith	Adenoma Hyperplasia Hyperplasia Adenoma	Basal Cell, Minimal Mild
* Pituitary Gland			
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 406	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 670
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46522

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3-6 ]

\* Stomach, Forestomach

Epithelium

Hyperplasia

Moderate

\* Testes

Interstit Cell

Adenoma

[ Adenoma TGLS = 2-9 ]

---

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 407      **TRT#:** 5      **SEX:** Male      **DAY ON TEST:** 729  
**DOSE:** 500 PPM      **DISP:** Terminal Sacrifice      **HISTO:** 46523

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Larynx	* Lung	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Islets, Pancreatic		Adenoma	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 5-7 ]			
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 4-7 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Minimal
		Adenoma	
* Pituitary Gland			
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 408

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46524

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Hyperplasia	Marked
* Eye	Bilateral, Retina	Atrophy	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Marked
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Olfactory Epi	Metaplasia	Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
	[ Adenoma TGLS = 1-9 ]		
* Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 408

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46524

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 409

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46525

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
* Eye	Lens	Cataract	Moderate
* Kidney	Pelvis, Transit Epithe Renal Tubule Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy	Moderate Mild Moderate Marked
[ Nephropathy TGLS = 4-7 ]			
* Liver	Bile Duct	Hyperplasia Vacuolization Cytoplasmic	Moderate Mild
[ Vacuolization Cytoplasmic TGLS = 3-6 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
* Nose	Respirat Epith Respirat Epith Squam Epithel Nasolacrim Dct	Adenoma Hyperplasia Hyperplasia Inflammation Inflammation Adenoma	Moderate Minimal Suppurative, Moderate Suppurative, Minimal
* Pituitary Gland			
[ Adenoma TGLS = 1-10 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 409	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46525

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 410

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46526

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Renal Tubule	Adenoma	
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Mild
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
Lymph Node	Pancreatic	Ectasia	Mild
	Pancreatic	Inflammation	Granulomatous, Mild
[ Inflammation TGLS = 3-15 ]			
* Lymph Node, Mediastinal		Hyperplasia	Lymphoid, Moderate
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Respirat Epith	Adenoma	
	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Suppurative, Moderate
* Pituitary Gland		Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 410

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46526

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes  
[ Adenoma TGLS = 2-9 ]

Bilateral, Interstit Cell

Adenoma

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 411

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 646  
**HISTO:** 46527

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney	Papilla	Leukemia Mononuclear Mineralization Nephropathy	Minimal Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-4 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-16 ]			
* Nose		Foreign Body	
* Pituitary Gland		Adenoma Leukemia Mononuclear	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 411	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 646
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46527

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 412

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46528

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
[ Alveolar/Bronchiolar Carcinoma TGLS = 4-18 ]			
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 6-18 ]			
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Marked
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
[ Accumulation, Hyaline Droplet TGLS = 8-7 ]			
* Liver		Basophilic Focus	
		Degeneration	Cystic, Mild
* Lung		Alveolar/Bronchiolar Carcinoma	Multiple
	Alveolar Epith	Hyperplasia	Mild
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-19 ]			
* Pituitary Gland		Hyperplasia	Moderate
Pleura		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
[ Alveolar/Bronchiolar Carcinoma TGLS = 1,4-14+18 ]			
Skeletal Muscle		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 412	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46528

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Alveolar/Bronchiolar Carcinoma TGLS = 2,3-15+17 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 7-9 ]		
* Thyroid Gland	C Cell	Carcinoma
PRIMARY CAUSE OF DEATH	-	

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 413

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46529

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Hyperplasia	Moderate
	Papilla	Mineralization	Moderate
		Nephropathy	Mild
* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
Pleura		Inflammation	Chronic, Minimal
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 414

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adren Medulla			
Note: ONLY ONE SECTION OF ADRENAL GLAND AVAILABLE FOR EXAMINATION.			
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Moderate Mild
* Liver	Bile Duct Periportal	Hyperplasia Inflammation Mixed Cell Focus Necrosis	Mild Chronic, Moderate  Moderate
Mesentery [ Necrosis TGLS = 2-14 ]			
* Nose	Olfactory Epi  Olfactory Epi	Hyperplasia Inflammation Metaplasia	Basal Cell, Minimal Suppurative, Minimal Moderate
Note: METAPLASIA TO HYPERPLASTIC RESPIRATORY EPITHELIUM. Note: olfact epith hyperplasia in xs3			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]		Adenoma	
* Prostate		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 414	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46530

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 3-9 ]			

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 415

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-15 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 416

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46532

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Bone                   | * Bone Marrow              | * Brain                   |
| * Epididymis                | * Esophagus              | * Eye                      | * Harderian Gland         |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Lung                   | * Lymph Node, Mediastinal  | * Lymph Node, Mesenteric  |
| * Mammary Gland             | * Pancreas               | * Parathyroid Gland        | * Prostate                |
| * Salivary Glands           | * Seminal Vesicle        | * Skin                     | * Stomach, Forestomach    |
| * Stomach, Glandular        | * Thymus                 | * Thyroid Gland            | * Trachea                 |
| * Urinary Bladder           |                          |                            |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                   |                              |                      |                     |
|-------------------|------------------------------|----------------------|---------------------|
| * Adrenal Medulla |                              | Hyperplasia          | Moderate            |
| * Kidney          | Papilla                      | Mineralization       | Moderate            |
|                   |                              | Nephropathy          | Mild                |
| * Liver           |                              | Basophilic Focus     |                     |
|                   |                              | Leukemia Mononuclear |                     |
| * Nose            | Respirat Epith               | Adenoma              |                     |
|                   | Glands, Respirat Epith       | Dilatation           | Moderate            |
|                   | Olfactory Epi                | Hyperplasia          | Basal Cell, Minimal |
| * Pituitary Gland |                              | Hyperplasia          | Moderate            |
| * Preputial Gland |                              | Carcinoma            |                     |
|                   |                              | Inflammation         | Suppurative, Marked |
|                   | [ Carcinoma TGLS = 1-14+15 ] |                      |                     |
| * Spleen          |                              | Leukemia Mononuclear |                     |
| * Testes          | Bilateral, Interstit Cell    | Adenoma              |                     |
|                   | [ Adenoma TGLS = 2-9 ]       |                      |                     |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 417

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46533

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Moderate Marked Moderate
* Liver		Basophilic Focus	
* Lung	Bile Duct Alveolar Epith Alveolus	Hyperplasia Hyperplasia Infiltration Cellular Inflammation	Minimal Mild Histiocyte, Minimal Chronic, Minimal
* Nose	Goblet Cell Olfactory Epi Respirat Epith	Hyperplasia Hyperplasia Hyperplasia	Mild Basal Cell, Minimal Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 417

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46533

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 418

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46534

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Renal Tubule	Hyperplasia	Marked
	Papilla	Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Hyperplasia TGLS = 7-7 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Cyst	Moderate
		Hyperplasia	Moderate
[ Cyst TGLS = 3-10 ]			
* Prostate		Hyperplasia	Mild
		Inflammation	Suppurative, Minimal
* Skin		Keratoacanthoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 418	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46534

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Subcut Tiss	Lipoma
[ Keratoacanthoma TGLS = 1-14 ]		
[ Lipoma TGLS = 2-15 ]		
* Spleen		Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 5-16 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 6-9 ]		

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 419

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 645

HISTO: 46535

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Mild
		Leukemia Mononuclear	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Preputial Gland		Cyst	Moderate
[ Cyst TGLS = 2-9 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 420

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 674  
**HISTO:** 46536

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
* Kidney	Papilla	Mineralization Nephropathy	Mild Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Nose	Respirat Epith Olfactory Epi Respirat Epith	Adenoma Hyperplasia Hyperplasia Hyperplasia	Basal Cell, Minimal Moderate Moderate
* Pituitary Gland			
[ Hyperplasia TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis Leukemia Mononuclear	Marked
[ Fibrosis TGLS = 2-14 ]			
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Minimal
[ Adenoma TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 420	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 674
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46536

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 421

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46537

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Adenoma	
		Hyperplasia	Marked
* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia	Moderate
		Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Eosinophilic Focus	
		Leukemia Mononuclear	
* Lung	Alveolar Epith Alveolus	Hyperplasia	Mild
		Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin		Basal Cell Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 421	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46537

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Basal Cell Adenoma TGLS = 4-15 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 422

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46538

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Brain		Compression	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4-5 ]	
* Lymph Node, Bronchial		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 2-4 ]	
* Mammary Gland		Carcinoma	
		[ Carcinoma TGLS = 1-14 ]	
* Nose	Glands, Respirat Epith	Adenoma	
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 5-10 ]	
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 422

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46538

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 423

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* 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

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Eye	Lens	Cataract	Minimal
* Kidney	Renal Tubule	Cyst	
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Renal Tubule	Hyperplasia	Mild
	Papilla	Mineralization	Mild
		Nephropathy	Marked
[ Cyst TGLS = 2-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 423

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46539

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 424

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46540

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Brain		Compression	Moderate
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 4-14 ]			
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Marked
[ Nephropathy TGLS = 2-7 ]			
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
* Nose	Glands, Respirat Epith	Dilatation	Moderate
	Glands, Respirat Epith	Hyperplasia	Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 424

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46540

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 425

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 569

HISTO: 46541

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Harderian Gland	* Intestine Large, Colon	* Intestine Large, Rectum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

* Eye	* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Nose	* Pituitary Gland	* Urinary Bladder

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Brain		Hemorrhage	Marked
* Heart		Cardiomyopathy	Marked
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Mild
* Lymph Node, Bronchial		Hyperplasia	Lymphoid, Marked
[ Hyperplasia TGLS = 1-3 ]			
* Lymph Node, Mediastinal		Hyperplasia	Lymphoid, Marked
Mesentery		Necrosis	Mild
[ Necrosis TGLS = 4-14 ]			
* Pituitary Gl			
Note: NO CORRESPONDING LESIONS FOR TGLS 2,3.			
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Brain Hemorrhage

CONTRIBUTORY CAUSE OF DEATH

- Heart Cardiomyopathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 426

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46542

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Bone		Hyperostosis	Moderate
[ Hyperostosis TGLS = 7-18 ]			
* Epididymis		Mesothelioma Malignant	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Marked
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Respirat Epith	Adenoma	Multiple
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
Note: two adenomas in xs1, one in xs 2			
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-16 ]			
* Prostate		Inflammation	Suppurative, Marked
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 6-15 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 426

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46542

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant
[ Adenoma TGLS = 3,4-9 ]		
* Urinary Bladder		Mesothelioma Malignant

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 427

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 695

HISTO: 46543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* 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		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Heart [ Thrombosis TGLS = 7-6 ]	Atrium	Thrombosis	Marked
* Kidney [ Infarct TGLS = 4-14 ] [ Nephropathy TGLS = 4,5-14 ]	Papilla	Infarct Leukemia Mononuclear Mineralization Nephropathy	Mild  Moderate Moderate
* Liver [ Leukemia Mononuclear TGLS = 6-6 ] [ Necrosis TGLS = 6-6 ]	Bile Duct	Hyperplasia Leukemia Mononuclear Necrosis	Marked  Marked
* Lung * Lym Node Mesen Note: hyperplasia is diffuse in this rat		Leukemia Mononuclear	
* Nose	Olfactory Epi Respirat Epith	Hyperplasia Hyperplasia	Basal Cell, Minimal Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 427	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 695
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46543

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen	Fibrosis	Marked
	Leukemia Mononuclear	
[ Fibrosis TGLS = 3-15 ]		
[ Leukemia Mononuclear TGLS = 2-15 ]		

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 428

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 688

HISTO: 46544

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Renal Tubule Papilla	Adenoma Mineralization Nephropathy Degeneration	Minimal Marked Cystic, Moderate
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
	[ Leukemia Mononuclear TGLS = 5-6,6-17,9-20 ]		
* Lung		Carcinoma	Metastatic (Skin)
	[ Carcinoma TGLS = 3-4+5 ]		
* Nose	Respirat Epith Nasolacrim Dct Olfactory Epi	Adenoma Inflammation Metaplasia Cyst	Suppurative, Mild Moderate Mild
* Preputial Gland		Basal Cell Carcinoma	
* Skin	Subcut Tiss	Fibroma	
	[ Basal Cell Carcinoma TGLS = 2-14 ]		
	[ Fibroma TGLS = 1-15+16 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 428	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 688
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46544

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Fibrosis	Marked
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 8-18 ]		
	[ Leukemia Mononuclear TGLS = 7-18 ]		
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
	[ Adenoma TGLS = 4-9 ]		
Urethra	Transit Epithe	Hyperplasia	Moderate

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Lung Carcinoma Skin

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 429

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 554  
**HISTO:** 46545

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Mild
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-16 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-7 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,10-15+16 ]			
* Nose	Olfactory Epi	Degeneration	Hyaline, Mild
		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 429	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 554
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46545

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland		Leukemia Mononuclear	
* Spleen		Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Marked
	[ Leukemia Mononuclear TGLS = 6,7-14 ]		
	[ Necrosis TGLS = 8-14 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-9 ]		

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 430

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46546

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Minimal Moderate
* Liver		Clear Cell Focus Mixed Cell Focus Vacuolization Cytoplasmic	Moderate
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Minimal
* Pituitary Gland		Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 431

TRT#: 5

SEX: Male

DAY ON TEST: 638

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46547

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Heart	Atrium	Thrombosis	Minimal
[ Thrombosis TGLS = 7-16 ]			
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Nose	Respirat Epith	Adenoma	
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-15 ]			
* Pituitary Gland		Hyperplasia	Mild
[ Hyperplasia TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Malignant	
[ Adenoma TGLS = 2,4-9 ]			
[ Mesothelioma Malignant TGLS = 5-15 ]			
* Urinary Bladder		Calculus Gross Observation	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 431	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 638
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46547

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 3-14 ]	Transit Epithe	Carcinoma
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**PRIMARY CAUSE OF DEATH** - Urinary Bladder Transit Epithe Carcinoma

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Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 432

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 600

HISTO: 46548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Lung	Interstitial	Fibrosis	Mild
	[ Fibrosis TGLS = 3-4+5 ]	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-4+5 ]		
* Nose	Squam Epithel	Inflammation	Minimal
* Pituitary Gland		Cyst	Marked
		Hyperplasia	Moderate
	[ Cyst TGLS = 2-10 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Inflammation	Suppurative, Mild
	[ Hyperplasia TGLS = 6-14 ]		

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 432	<b>TRT#:</b> 5 <b>DOSE:</b> 500 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 600 <b>HISTO:</b> 46548
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Atrophy TGLS = 5-9 ]	Germinal Epith Interstit Cell	Atrophy Hyperplasia	Moderate Mild
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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 433

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46549

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia	Moderate
		Mineralization	Moderate
		Nephropathy	Marked
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-4 ]	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith Respirat Epith	Adenoma	
		Hyperplasia	Marked
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 5-10 ]	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
		[ Hemorrhage TGLS = 3-14 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 433	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46549

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 4-14 ]

* Testes	Germinal Epith	Atrophy	Mild
	Interstit Cell	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Marked

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 434

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 639

HISTO: 46550

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Bilateral, Renal Tubule Pelvis, Transit Epithe Renal Tubule	Carcinoma Hyperplasia Hyperplasia Leukemia Mononuclear	Mild Mild
	Papilla	Mineralization Nephropathy	Moderate Marked
[ Carcinoma TGLS = 5,6-7 ]			
* Liver	Bile Duct	Hepatocellular Adenoma Hyperplasia Leukemia Mononuclear	Marked
[ Hepatocellular Adenoma TGLS = 4-6 ]			
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Olfactory Epi Respirat Epith	Hyperplasia Hyperplasia	Basal Cell, Minimal Minimal
* Pancreas	Acinus	Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 434	<b>TRT#:</b> 5 <b>DOSE:</b> 500 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 639 <b>HISTO:</b> 46550
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Hyperplasia TGLS = 1-10 ]		Hyperplasia	Marked
* Prostate		Inflammation	Suppurative, Mild
* Spleen [ Leukemia Mononuclear TGLS = 2-14 ]		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 435

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 702

HISTO: 46551

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Trachea

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Renal Tubule	Adenoma	
		Leukemia Mononuclear	
		Nephropathy	Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]	
		[ Leukemia Mononuclear TGLS = 2-6 ]	
* Lung		Leukemia Mononuclear	
* Nose	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland		Hemorrhage	Marked
		[ Hemorrhage TGLS = 1-10 ]	
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4,6-15+16 ]	
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 5-9 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 435	<b>TRT#:</b> 5 <b>DOSE:</b> 500 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 702 <b>HISTO:</b> 46551
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Adenoma	
* Urinary Bladder	Transit Epithe	Hyperplasia Inflammation	Moderate Chronic, Mild

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 436

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 670

HISTO: 46552

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Heart	Atrium	Thrombosis	Mild
* Kidney	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: NO CORRELATING LESIONS FOR TGL 8.			
[ Hyperplasia TGLS = 9,10-18+19 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-16 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
* Nose	Respirat Epith	Adenoma	Multiple
		Foreign Body	
	Glands, Olfactory Epi	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 436

**TRT#:** 5

**DOSE:** 500 PPM

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 670

**HISTO:** 46552

**ORGAN AND ACCOUNTABLE SITE STATUS**

	Goblet Cell	Hyperplasia	Moderate
	Goblet Cell, Olfactory Epi	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
		Inflammation	Suppurative, Mild
	Olfactory Epi	Metaplasia	Moderate
		Adenoma	
* Pituitary Gland			
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 3-21 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-20 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 437

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 460

HISTO: 46553

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
* Eye	Ciliary Body, Iris	Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 2-13 ]			
* Kidney	Renal Tubule	Hyperplasia	Moderate
	Papilla	Leukemia Mononuclear	
		Mineralization	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]		Vacuolization Cytoplasmic	Mild
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-15 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Stomach, Forestomach		Inflammation	Suppurative, Mild
[ Inflammation TGLS = 6-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 437	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 460
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46553

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
* Thymus		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 438

TRT#: 5

SEX: Male

DAY ON TEST: 648

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46554

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Moderate
* Brain		Compression	Mild
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 2-7 ]			
* Liver	Bile Duct	Hyperplasia	Marked
	Periportal	Inflammation	Chronic, Marked
[ Hyperplasia TGLS = 4-14 ]			
[ Inflammation TGLS = 4-14 ]			
* Lung		Inflammation	Chronic, Minimal
Lymph Node	Deep Cervical	Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 5-17 ]			
* Nose	Goblet Cell	Hyperplasia	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Mild
	Olfactory Epi	Ulcer	Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 438

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 648

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46554

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
[ Ulcer TGLS = 3-16 ]			
* Testes	Interstit Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 439

TRT#: 5

SEX: Male

DAY ON TEST: 523

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Leukemia Mononuclear Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-15 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Hyperplasia	Marked
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hemorrhage	Marked
[ Hemorrhage TGLS = 2-14 ]			
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Stomach, Glandular		Ulcer	Marked
[ Ulcer TGLS = 5-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

- Spleen Hemorrhage

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear;Stomach;Glandular Ulcer

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 439

**TRT#:** 5  
**DOSE:** 500 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 523  
**HISTO:** 46555

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 440

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46556

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
* Kidney	Renal Tubule	Adenoma	
	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Moderate
		Nephropathy	Marked
	[ Nephropathy TGLS = 4-7 ]		
* Liver		Clear Cell Focus	
		Eosinophilic Focus	
	[ Clear Cell Focus TGLS = 3-16 ]		
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Galactocele	Marked
	Epithelium	Hyperplasia	Marked
	[ Galactocele TGLS = 5-14 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 2-15 ]		
* Nose	Respirat Epith	Adenoma	
Pleura		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 440

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46556

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 6-18 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 441

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 213

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46557

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	Peripheral Nerve	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	Spinal Cord
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney [ Dilatation TGLS = 4,5,6-7+14 ]	Pelvis	Dilatation	Marked
* Lung [ Carcinoma TGLS = 7-4+5 ]		Carcinoma	Metastatic (Urinary Bladder)
Peritoneum [ Carcinoma TGLS = 3,8,10-14+15 ]		Carcinoma	Metastatic (Urinary Bladder)
* Prostate [ Carcinoma TGLS = 2-16+17 ]		Carcinoma	Metastatic (Urinary Bladder)
Skeletal Muscle [ Carcinoma TGLS = 8-15 ]		Carcinoma	Metastatic (Urinary Bladder)
* Testes [ Necrosis TGLS = 9-9 ]		Necrosis	Marked
* Urinary Bladder [ Carcinoma TGLS = 1,2-16+17 ]	Transit Epithe	Carcinoma	

**PRIMARY CAUSE OF DEATH** - Urinary Bladder Transit Epithe Carcinoma  
**CONTRIBUTORY CAUSE OF DEATH** - Kidney Pelvis Dilatation

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 442

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 626

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46558

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Adenoma	
* Heart		Cardiomyopathy	Marked
	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 5-6 ]			
* Kidney	Capsule	Dilatation	Moderate
	Pelvis, Transit Epithe	Hyperplasia	Minimal
		Infarct	Marked
	Papilla	Mineralization	Mild
		Nephropathy	Mild
[ Dilatation TGLS = 11-16 ]			
[ Infarct TGLS = 12-7 ]			
* Liver		Leukemia Mononuclear	
		Necrosis	Mild
[ Leukemia Mononuclear TGLS = 10-6 ]			
* Lung		Hemorrhage	Moderate
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 13-14 ]			
[ Leukemia Mononuclear TGLS = 4-4+5 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 442

**TRT#:** 5

**DOSE:** 500 PPM

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 626

**HISTO:** 46558

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Olfactory Epi	Degeneration	Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
		Inflammation	Suppurative, Marked
	Olfactory Epi	Ulcer	Marked
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 6-10 ]		
* Spleen		Fibrosis	Moderate
	[ Fibrosis TGLS = 9-15 ]		
	[ Leukemia Mononuclear TGLS = 8-15 ]		
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
	[ Adenoma TGLS = 7-9 ]		
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		
CONTRIBUTORY CAUSE OF DEATH	- Heart Atrium Thrombosis		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 443

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46559

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Adenoma	
* Brain		Hemorrhage	Minimal
* Kidney	Renal Tubule	Hyperplasia	Moderate
	Papilla	Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]	
		[ Leukemia Mononuclear TGLS = 3-6 ]	
* Lung	Bronchiole	Inflammation	Chronic, Mild
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
* Pituitary Gland		Adenoma	
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		[ Hyperplasia TGLS = 5-15 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	
		[ Adenoma TGLS = 1,2-9 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 443

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46559

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 444

TRT#: 5

SEX: Male

DAY ON TEST: 554

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46560

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |  |                |                      |        |
|--|----------------|----------------------|--------|
| * Kidney                               | Papilla        | Mineralization       | Mild   |
|  |                | Nephropathy          | Mild   |
| * Lung                                 |                | Inflammation         | Mild   |
| [ Inflammation TGLS = 5-14 ]           |                |                      |        |
| * Skin                                 |                | Basal Cell Carcinoma |        |
| [ Basal Cell Carcinoma TGLS = 3,4-15 ] |                |                      |        |
| * Testes                               | Interstit Cell | Adenoma              |        |
|  | Interstit Cell | Hyperplasia          | Marked |
| [ Adenoma TGLS = 2-9 ]                 |                |                      |        |
| [ Hyperplasia TGLS = 2-9 ]             |                |                      |        |

PRIMARY CAUSE OF DEATH

- Skin Basal Cell Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 445

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46561

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Renal Tubule Papilla	Cyst Mineralization Nephropathy Degeneration	Moderate Marked Cystic, Moderate
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia Leukemia Mononuclear Necrosis	Minimal Marked
Mesentery [ Necrosis TGLS = 2-14 ]			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-9 ]	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 445

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46561

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 446

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46562

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Mild
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-17 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Inflammation	Chronic, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Hyperkeratosis	Marked
[ Hyperkeratosis TGLS = 1-14 ]			
* Spleen		Fibrosis	Marked
		Leukemia Mononuclear	
[ Fibrosis TGLS = 3-15 ]			
[ Leukemia Mononuclear TGLS = 4-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 446	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46562

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 447

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46563

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Hyperplasia	Marked
		Pheochromocytoma Benign	
	[ Pheochromocytoma Benign TGLS = 10-7 ]		
* Kidney	Renal Tubule	Carcinoma	
	Bilateral, Renal Tubule	Cyst	
	Pelvis, Transit Epithe	Hyperplasia	Marked
	Papilla	Mineralization	Moderate
		Nephropathy	Marked
	[ Carcinoma TGLS = 7-14 ]		
	[ Cyst TGLS = 5,6-7+19 ]		
* Liver		Mixed Cell Focus	
	[ Mixed Cell Focus TGLS = 9-18 ]		
* Mammary Gland		Galactocele	Marked
	[ Galactocele TGLS = 1,2-16+17 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 8-15 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Nasolacrim Dct	Inflammation	Suppurative, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 447	<b>TRT#:</b> 5 <b>DOSE:</b> 500 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46563
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland [ Adenoma TGLS = 3-10 ]		Adenoma	
* Stomach, Glandular [ Hyperplasia TGLS = 11-21 ]		Hyperplasia	Lymphoid, Moderate
* Testes [ Adenoma TGLS = 4-9 ]	Interstit Cell Interstit Cell Artery	Adenoma Hyperplasia Inflammation	Mild Chronic Active, Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 448

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 679

HISTO: 46564

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
* Brain		Compression	Mild
* Islets, Pancreatic		Adenoma	
[ Adenoma TGLS = 2-15 ]			
* Kidney	Renal Tubule	Adenoma	
		Leukemia Mononuclear	
	Papilla	Mineralization	Moderate
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4,5-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 448

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 679

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46564

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 449

TRT#: 5

DOSE: 500 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46565

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule Papilla	Carcinoma Mineralization Nephropathy	Minimal Moderate
[ Carcinoma TGLS = 2-7 ]			
* Liver		Clear Cell Focus	
* Nose	Olfactory Epi Epithelium, Nasolacrim Dct Olfactory Epi	Hyperplasia Metaplasia Metaplasia	Basal Cell, Minimal Squamous, Mild Mild
* Pituitary Gland		Hyperplasia	Marked
* Skin		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-14 ]			
* Spleen		Fibrosis	Moderate
[ Fibrosis TGLS = 3-15 ]			
* Testes	Germinal Epith Interstitial Cell Artery	Atrophy Hyperplasia Inflammation	Moderate Mild Chronic Active, Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 450

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46566

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* 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			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Eosinophilic Focus	Multiple
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-6 ]		
* Nose	Respirat Epith	Adenoma	
* Pancreas	Acinus	Atrophy	Mild
* Pituitary Gland		Hyperplasia	Moderate
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 4-14 ]		
	[ Leukemia Mononuclear TGLS = 3-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1,2-9+15 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 601

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Lens	Cataract	Mild
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Renal Tubule	Hypertrophy	Moderate
	Papilla	Mineralization	Mild
* Liver		Nephropathy	Marked
		Clear Cell Focus	
		Vacuolization Cytoplasmic	Mild
* Lung	Alveolar Epith	Hyperplasia	Mild
* Lymph Node, Mesenteric		Lymphoma Malignant	
	[ Lymphoma Malignant TGLS = 2-14 ]		
* Mammary Gland	Epithelium	Hyperplasia	Mild
* Nose	Respirat Epith	Adenoma	Multiple
* Pituitary Gland		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 602

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Lens	Cataract	Mild
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Moderate Marked
* Liver		Clear Cell Focus Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 2-6 ]			
Lymph Node	Deep Cervical Deep Cervical	Ectasia Hyperplasia	Marked Lymphoid, Moderate
[ Ectasia TGLS = 3-14 ]			
* Nose	Goblet Cell	Foreign Body Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 4-15 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Moderate
[ Adenoma TGLS = 1-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 602

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46418

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 603

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Hemorrhage	Mild
[ Hemorrhage TGLS = 4-15 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas	Acinus	Atrophy	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Trichoepithelioma	
[ Trichoepithelioma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 603	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46419

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Bilateral, Interstit Cell	Adenoma
* Thyroid Gland	C Cell	Adenoma

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 604

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 541

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46420

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* 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			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Heart	Atrium	Thrombosis	Moderate
* Kidney		Infarct	Mild
		Nephropathy	Mild
	[ Nephropathy TGLS = 5-7 ]		
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Mild
	[ Leukemia Mononuclear TGLS = 8,9-6+14 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6,7-4+5 ]		
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-16 ]		
	[ Leukemia Mononuclear TGLS = 4-15 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 10-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 604

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 541

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46420

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Heart Atrium Thrombosis

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 605

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
* Heart		Cardiomyopathy	Minimal
* Kidney	Renal Tubule	Carcinoma	
	Papilla	Mineralization	Mild
		Nephropathy	Mild
[ Carcinoma TGLS = 1-7 ]			
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Marked
	Alveolar Epith	Metaplasia	Mucous, Moderate
	Alveolar Epith	Metaplasia	Squamous, Marked
	Alveolus	Proteinosis	Moderate
[ Fibrosis TGLS = 3-5 ]			
[ Inflammation TGLS = 3-5 ]			
* Nose	Respirat Epith	Adenoma	Multiple
	Glands, Respirat Epith	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 605	<b>TRT#:</b> 7 <b>DOSE:</b> 1000 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 729 <b>HISTO:</b> 46421
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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	Respirat Epith	Hyperplasia Inflammation Adenoma	Marked Suppurative, Mild
* Pituitary Gland		Inflammation	Chronic, Moderate
Pleura		Inflammation	Suppurative, Mild
* Prostate		Leukemia Mononuclear	
* Spleen		Adenoma	
* Testes	Bilateral, Interstit Cell		
[ Adenoma TGLS = 2-9 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 606

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 677

HISTO: 46422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Minimal Mild
* Liver		Clear Cell Focus Hepatocellular Carcinoma	
	[ Hepatocellular Carcinoma TGLS = 4-18 ]		
* Lung	Alveolar Epith Alveolus	Alveolar/Bronchiolar Carcinoma Hyperplasia Infiltration Cellular	Mild Histiocyte, Mild
	[ Alveolar/Bronchiolar Carcinoma TGLS = 6-17 ]		
* Nose	Olfactory Epi Respirat Epith	Hyperplasia Inflammation	Basal Cell, Minimal Chronic, Mild
* Pancreas	Acinus	Atrophy	Moderate
* Pituitary Gl			
	Note: No corresponding lesion to TGL 5; not much pituitary tissue on slide.		
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 2-14+15+16 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 606

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 677

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46422

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Leukemia Mononuclear
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 3-9 ]		
* Thyroid Gland	C Cell	Adenoma
[ Adenoma TGLS = 1-3 ]		

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PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

CONTRIBUTORY CAUSE OF DEATH

- Liver Hepatocellular Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 607

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Eye	Bilateral, Lens	Cataract	Minimal
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 3-7 ]			
* Liver		Clear Cell Focus	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 608

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46424

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Kidney		Nephropathy	Moderate
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 3-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
[ Hyperplasia TGLS = 5-5 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-15 ]			
* Nose	Glands, Respirat Epith	Hyperplasia	Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-15 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:28

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 609

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Hyperplasia	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Marked
* Larynx		Foreign Body	Marked
	Respirat Epith	Hyperplasia	Minimal
	Epiglottis	Metaplasia	Squamous, Mild
* Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-6 ]		
* Lung	Alveolus	Emphysema	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Moderate
* Nose	Goblet Cell	Hyperplasia	Minimal
	Respirat Epith	Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	Follicular Cel	Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 609	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46425

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 1-3 ]			
* Trachea	Epithelium	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 610

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46426

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Hemorrhage	Mild
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
[ Leukemia Mononuclear TGLS = 9-7 ]			
* Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-4+5 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-17 ]			
[ Leukemia Mononuclear TGLS = 8-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:28

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 610

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 726

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46426

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Nose	Goblet Cell	Hyperplasia	Mild
	Respirat Epith	Hyperplasia	Marked
		Leukemia Mononuclear	
* Pituitary Gland		Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6,7-14 ]		
* Stomach, Forestomach		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
	[ Adenoma TGLS = 4-9 ]		
	[ Atrophy TGLS = 5-9 ]		
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 611

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 635

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46427

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Medulla		Leukemia Mononuclear	
* Heart	Atrium	Thrombosis	Moderate
* Kidney	Renal Tubule	Adenoma	
	Papilla	Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Mild
[ Adenoma TGLS = 8-7 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6,7-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-15 ]			
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Nose	Respirat Epith	Hyperplasia	Minimal
	Respirat Epith	Necrosis	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 9-10 ]			
* Prostate		Inflammation	Suppurative, Mild
[ Inflammation TGLS = 14-17 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:28  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 611	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46427

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 4-15 ]		Leukemia Mononuclear	
* Stom Gland Note: NCL on tgls 12 and 13.			
* Stomach, Forestomach [ Ulcer TGLS = 10-16 ]	Epithelium	Hyperplasia Ulcer	Mild Marked
* Testes	Bilateral, Interstit Cell	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tongue [ Hyperplasia TGLS = 1-14 ]	Epithelium	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:28

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 612

TRT#: 7

SEX: Male

DAY ON TEST: 554

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Epididymis		Carcinoma	Metastatic (Prostate)
* Heart		Carcinoma	Metastatic (Prostate)
* Kidney		Atrophy	Marked
		Carcinoma	Metastatic (Prostate)
	Pelvis	Dilatation	Marked
	Papilla	Mineralization	Mild
		Nephropathy	Minimal
[ Atrophy TGLS = 3,4-7 ]			
[ Dilatation TGLS = 4-7 ]			
* Liver		Carcinoma	Metastatic (Prostate)
[ Carcinoma TGLS = 2,9-6+14 ]			
* Lung		Carcinoma	Metastatic (Prostate)
Mesentery		Carcinoma	Metastatic (Prostate)
[ Carcinoma TGLS = 7-16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas		Carcinoma	Metastatic (Prostate)
Peritoneum		Carcinoma	Metastatic (Prostate)
[ Carcinoma TGLS = 1,7,8-17+16+18 ]			
* Pituitary Gland		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 612	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 554
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46428

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate [ Carcinoma TGLS = 6-15 ]		Carcinoma	
* Seminal Vesicle		Carcinoma	Metastatic (Prostate)
Skeletal Muscle [ Carcinoma TGLS = 1-17 ]		Carcinoma	Metastatic (Prostate)
* Spleen		Carcinoma	Metastatic (Prostate)
* Testes [ Adenoma TGLS = 5-9 ]	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
Ureter		Carcinoma	Metastatic (Prostate)
Urethra		Carcinoma	Metastatic (Prostate)

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PRIMARY CAUSE OF DEATH	- Prostate Carcinoma
CONTRIBUTORY CAUSE OF DEATH	- Peritoneum Carcinoma Prostate

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 613

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 705

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46429

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Minimal
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 3-6 ]			
* Kidney	Renal Tubule	Cyst	
		Leukemia Mononuclear	
		Nephropathy	Mild
[ Cyst TGLS = 7-7 ]			
[ Leukemia Mononuclear TGLS = 14-7 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8,9-6+16 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-4+5 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 13-17 ]			
Mesentery		Hemorrhage	Moderate
[ Hemorrhage TGLS = 12-16 ]			
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 613	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 705
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46429

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 4,5,6-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
[ Hyperplasia TGLS = 15-10 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstit Cell	Hyperplasia	Marked
[ Adenoma TGLS = 10-9 ]			
[ Atrophy TGLS = 11-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 614

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46430

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Pelvis, Transit Epithe Renal Tubule	Hyperplasia Hyperplasia Leukemia Mononuclear	Moderate Mild
	Papilla	Mineralization Nephropathy	Moderate Marked
	[ Nephropathy TGLS = 5-7 ]		
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Respirat Epith Respirat Epith	Adenoma Hyperplasia	Multiple Mild
* Pancreas		Hyperplasia	Moderate
* Pituitary Gland		Adenoma Hemorrhage	Marked
	[ Adenoma TGLS = 1-10 ]		
	[ Hemorrhage TGLS = 7-1 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 614	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 730
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46430

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Hyperplasia Inflammation	Mild Suppurative, Moderate
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 6-17+18 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,4-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia Ulcer	Marked Marked
[ Ulcer TGLS = 8-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 615

TRT#: 7

SEX: Male

DAY ON TEST: 711

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Hyperplasia Leukemia Mononuclear	Mild
	Papilla	Mineralization Nephropathy	Moderate Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Mild
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung	Alveolar Epith	Hyperplasia Leukemia Mononuclear	Moderate
* Pituitary Gland		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibroma	
	[ Fibroma TGLS = 5-15 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-16 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2,6-9 ]		
* Thyroid Gland	Follicular Cel	Adenoma	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 615

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 711

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46431

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 616

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 660

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46432

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Marked Moderate
[ Nephropathy TGLS = 5-7 ]			
* Larynx		Foreign Body	Marked
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Nose		Foreign Body Inflammation	Suppurative, Minimal
* Pancreas	Acinus	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia Ulcer	Marked Marked
[ Ulcer TGLS = 6-17 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 616	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 660
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46432

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 2-15 ]	Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma		
CONTRIBUTORY CAUSE OF DEATH	- Spleen Leukemia Mononuclear;Stomach;Forestomach Ulcer		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 617

TRT#: 7

SEX: Male

DAY ON TEST: 635

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Mild Mild Mild
* Liver	Bile Duct	Degeneration Hyperplasia Leukemia Mononuclear Necrosis	Cystic, Moderate Mild Moderate
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung	Alveolus	Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Nose	Olfactory Epi Respirat Epith	Hyperplasia Hyperplasia	Basal Cell, Minimal Mild
* Pituitary Gland		Adenoma	
* Preputial Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 1-14 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular		Erosion	Mild
[ Erosion TGLS = 3-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 617	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 635
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46433

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 618

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 584

HISTO: 46434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mesenteric	* Mammary Gland
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
[ Inflammation TGLS = 5-15 ]			
Lymph Node	Deep Cervical	Hyperplasia	Lymphoid, Marked
[ Hyperplasia TGLS = 4-17 ]			
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 3-3 ]			
* Nose	Respirat Epith	Hyperplasia	Mild
* Pancreas	Acinus	Hyperplasia	Mild
* Pituitary Gland		Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
[ Adenoma TGLS = 6-9 ]			
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 2-14+16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 618

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 584

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46434

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 619

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Marked
* Kidney	Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Mild Moderate Mild
* Liver	[ Leukemia Mononuclear TGLS = 6-6 ]	Leukemia Mononuclear	
* Lung		Fibroadenoma	
* Mammary Gland	[ Fibroadenoma TGLS = 2-16 ]		
* Nose	Olfactory Epi Respirat Epith  Olfactory Epi	Hyperplasia Hyperplasia Inflammation Metaplasia	Basal Cell, Minimal Moderate Suppurative, Moderate Mild
* Pituitary Gland		Adenoma	
* Prostate		Hyperplasia Inflammation	Minimal Suppurative, Minimal
* Skin		Inflammation Ulcer	Chronic, Marked Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 619

**TRT#:** 7  
**DOSE:** 1000 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 729  
**HISTO:** 46435

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 1,7-15+17 ]	
* Spleen	Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 5-14 ]	
* Testes	Bilateral, Interstit Cell
[ Adenoma TGLS = 3,4-9 ]	Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 620

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46436

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Mild
	[ Cataract TGLS = 4-13 ]		
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Moderate
* Liver		Clear Cell Focus	
		Degeneration	Cystic, Marked
	[ Degeneration TGLS = 2-6 ]		
* Nose	Respirat Epith	Adenoma	
	Goblet Cell	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 5-10 ]		
* Skin		Cyst Epithelial Inclusion	Marked
	[ Cyst Epithelial Inclusion TGLS = 3-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 620

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46436

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 621

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Renal Tubule	Cyst	
	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Marked
		Nephropathy	Moderate
			[ Cyst TGLS = 3-14 ]
* Lung		Carcinoma	Metastatic (Thyroid Gland)
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Minimal
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland		Adenoma	
			[ Adenoma TGLS = 1-10 ]
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Fibrosis	Moderate
		Hematopoietic Cell Proliferation	Moderate
			[ Fibrosis TGLS = 4-16 ]
			[ Hematopoietic Cell Proliferation TGLS = 4-16 ]
* Testes	Bilateral, Interstit Cell	Adenoma	
			[ Adenoma TGLS = 2-9 ]

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 621

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46437

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Carcinoma

C Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 622

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Islets, Pancreatic		Adenoma	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 623

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Adenoma	Multiple
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Hyperplasia	Marked
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Basal Cell Adenoma	
	[ Basal Cell Adenoma TGLS = 3-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1,2-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 624

TRT#: 7

SEX: Male

DAY ON TEST: 650

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Marked
* Liver		Degeneration	Cystic, Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 12-4 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 10-8+17 ]		
Mesentery	Fat	Hemorrhage	Moderate
	[ Hemorrhage TGLS = 8-14 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
	[ Hemorrhage TGLS = 6,7-15+16 ]		
	[ Leukemia Mononuclear TGLS = 5,6,7-15+16 ]		
* Stomach, Glandular		Erosion	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 624	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 650
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46440

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Erosion TGLS = 11-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 9-9 ]			
Tongue	Epithelium	Hyperplasia	Mild
[ Hyperplasia TGLS = 13-18 ]			

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PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Spleen	Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 625

TRT#: 7

SEX: Male

DAY ON TEST: 628

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Mild Marked
[ Nephropathy TGLS = 2-7 ]			
* Lung	Alveolus	Infiltration Cellular Necrosis	Histiocyte, Minimal Moderate
Mesentery			
[ Necrosis TGLS = 3-7 ]			
* Nose	Glands, Olfactory Epi Olfactory Epi Respirat Epith Olfactory Epi Olfactory Epi	Hyperplasia Hyperplasia Hyperplasia Inflammation Metaplasia Adenoma	Mild Basal Cell, Minimal Mild Chronic, Mild Moderate
* Pituitary Gland			
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Testes	Interstit Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 625

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 628

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46441

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 626

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* 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		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Renal Tubule	Carcinoma	
	Pelvis, Transit Epithe	Hyperplasia	Mild
		Leukemia Mononuclear	
		Nephropathy	Moderate
[ Carcinoma TGLS = 5-14 ]			
* Liver		Hepatocellular Carcinoma	
		Leukemia Mononuclear	
[ Hepatocellular Carcinoma TGLS = 4-16 ]			
* Lung		Inflammation	Chronic, Minimal
		Leukemia Mononuclear	
		Leukemia Mononuclear	
* Lymph Node, Bronchial			
[ Leukemia Mononuclear TGLS = 1-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 626

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46442

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Hemorrhage TGLS = 3-15 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 2-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 627

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 717

HISTO: 46443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* 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	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Marked
	[ Nephropathy TGLS = 6-7 ]		
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7,8-6+14 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-7 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-8 ]		
* Nose	Glands, Respirat Epith	Hyperplasia	Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 627

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 717

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46443

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**ORGAN AND ACCOUNTABLE SITE STATUS**

Germinal Epith

Atrophy

Moderate

[ Adenoma TGLS = 3-9 ]

[ Atrophy TGLS = 2-9 ]

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**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 628

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 674

HISTO: 46444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Heart		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
[ Alveolar/Bronchiolar Carcinoma TGLS = 3-14 ]			
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet Nephropathy	Marked Moderate
[ Nephropathy TGLS = 5-7 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-15 ]			
* Lung	Alveolar Epith	Alveolar/Bronchiolar Carcinoma Hyperplasia	Multiple Mild
[ Alveolar/Bronchiolar Carcinoma TGLS = 2-4+5+14 ]			
* Nose	Respirat Epith	Adenoma Foreign Body Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH - Lung Alveolar/Bronchiolar Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 629

TRT#: 7

SEX: Male

DAY ON TEST: 618

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Kidney	Renal Tubule Renal Tubule	Carcinoma Hyperplasia Nephropathy	Moderate Mild
[ Carcinoma TGLS = 5-14 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]			
Lymph Node	Deep Cervical	Hemorrhage	Moderate
[ Hemorrhage TGLS = 1-16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia Ulcer	Marked Marked
[ Ulcer TGLS = 6-15 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Moderate
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 629

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 618

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46445

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 630

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 642

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46446

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Brain		Compression	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Minimal Marked
	[ Nephropathy TGLS = 2-7 ]		
* Liver		Basophilic Focus	
* Nose	Olfactory Epi Olfactory Epi	Hyperplasia Necrosis Adenoma	Basal Cell, Minimal Minimal
* Pituitary Gland			
	[ Adenoma TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia Ulcer	Moderate Moderate
	[ Ulcer TGLS = 4,5-14 ]		
* Stomach, Glandular		Ulcer	Marked
* Testes	Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

**PRIMARY CAUSE OF DEATH** - Stomach, Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 630

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 642

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46446

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**CONTRIBUTORY CAUSE OF DEATH** - Kidney Nephropathy;Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 631

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Mild
* Kidney	Renal Tubule	Hyperplasia	Mild
	Papilla	Mineralization	Marked
		Nephropathy	Marked
[ Nephropathy TGLS = 7-7 ]			
* Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Alveolar/Bronchiolar Adenoma	
[ Alveolar/Bronchiolar Adenoma TGLS = 1-14 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 631	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46447

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Fibrosis	Marked
		Leukemia Mononuclear	
[ Fibrosis TGLS = 5-14 ]			
[ Leukemia Mononuclear TGLS = 4-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 8-9 ]			
* Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Mild
[ Carcinoma TGLS = 2-3 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 632

TRT#: 7

SEX: Male

DAY ON TEST: 677

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Moderate
[ Nephropathy TGLS = 7-7 ]			
* Liver		Leukemia Mononuclear	
		Necrosis	Minimal
[ Leukemia Mononuclear TGLS = 8-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
		Leukemia Mononuclear	
[ Hyperplasia TGLS = 3-16 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-15 ]			
* Nose	Respirat Epith	Adenoma	Multiple
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Hyperplasia	Moderate
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 632	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 677
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46448

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 5,6-17+18 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 4-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland [ Carcinoma TGLS = 2-3 ]	Follicular Cel C Cell	Carcinoma Hyperplasia	Minimal

---

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 633

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 720

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46449

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 9-15 ]			
* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Marked
[ Cataract TGLS = 11-13 ]			
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Moderate
		Nephropathy	Marked
[ Nephropathy TGLS = 8-7 ]			
* Liver		Basophilic Focus	
		Necrosis	Moderate
* Lung	Alveolar Epith	Hyperplasia	Mild
		Pheochromocytoma Malignant	Metastatic (Adrenal Medulla)
Lymph Node	Pancreatic	Ectasia	Moderate
[ Ectasia TGLS = 7-16 ]			
* Nose	Glands, Respirat Epith	Dilatation	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 12-10 ]			
* Prostate		Inflammation	Suppurative, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 633	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 720
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46449

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Skin [ Keratoacanthoma TGLS = 1,10-14+16 ]		Keratoacanthoma	Multiple
* Spleen [ Leukemia Mononuclear TGLS = 5,6-14 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-9 ] [ Atrophy TGLS = 4-9 ]	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate

---

PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Adrenal Medulla Pheochromocytoma Malignant

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 634

TRT#: 7

SEX: Male

DAY ON TEST: 718

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Epididymis	* Esophagus
* Eye	* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Mild
		Galactoceles	Mild
* Mammary Gland			
[ Galactoceles TGLS = 7-14 ]			
* Nose	Glands, Respirat Epith	Hyperplasia	Marked
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
[ Ulcer TGLS = 8-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 634

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 718

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46450

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 635

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46451

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Moderate Marked
[ Nephropathy TGLS = 4-7 ]			
* Liver		Clear Cell Focus Degeneration	Cystic, Mild
[ Degeneration TGLS = 3-7 ]			
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal
* Nose	Respirat Epith	Hyperplasia	Marked
* Pituitary Gland		Hyperplasia	Marked
Pleura		Inflammation	Chronic, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-9 ]			
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 636

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46452

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Histiocytic Sarcoma	
	Oval Cell	Hyperplasia	Marked
Note: differential dx is urothelial ca of bladder metastatic to liver [ Histiocytic Sarcoma TGLS = 3-14 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Urinary Bladder	Transit Epithe	Carcinoma	
[ Carcinoma TGLS = 2-10 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 637

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 688

HISTO: 46453

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                            |                           |                             |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| * Bone                    | * Bone Marrow              | * Brain                   | * Epididymis                |
| * Esophagus               | * Eye                      | * Harderian Gland         | * Heart                     |
| * Intestine Large, Cecum  | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum  | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Lymph Node, Mediastinal | * Mammary Gland            | * Pancreas                | * Parathyroid Gland         |
| * Preputial Gland         | * Salivary Glands          | * Seminal Vesicle         | * Skin                      |
| * Stomach, Forestomach    | * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             |
| * Trachea                 | * Urinary Bladder          |                           |                             |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                          |                                      |                         |                     |
|--------------------------|--------------------------------------|-------------------------|---------------------|
| * Adrenal Cortex         |                                      | Hyperplasia             | Marked              |
| * Adrenal Medulla        |                                      | Pheochromocytoma Benign |                     |
| * Kidney                 |                                      | Leukemia Mononuclear    |                     |
|                          | Papilla                              | Mineralization          | Minimal             |
|                          |                                      | Nephropathy             | Mild                |
| * Liver                  |                                      | Leukemia Mononuclear    |                     |
|                          | [ Leukemia Mononuclear TGLS = 6-6 ]  |                         |                     |
| * Lung                   |                                      | Leukemia Mononuclear    |                     |
|                          | [ Leukemia Mononuclear TGLS = 2-5 ]  |                         |                     |
| * Lymph Node, Mesenteric |                                      | Leukemia Mononuclear    |                     |
|                          | [ Leukemia Mononuclear TGLS = 7-8 ]  |                         |                     |
| * Nose                   | Olfactory Epi                        | Hyperplasia             | Basal Cell, Minimal |
| * Pituitary Gland        |                                      | Adenoma                 |                     |
|                          | [ Adenoma TGLS = 1-10 ]              |                         |                     |
| * Prostate               |                                      | Inflammation            | Suppurative, Mild   |
| * Spleen                 |                                      | Hemorrhage              | Marked              |
|                          |                                      | Leukemia Mononuclear    |                     |
|                          | [ Hemorrhage TGLS = 4,8-14+15 ]      |                         |                     |
|                          | [ Leukemia Mononuclear TGLS = 3-14 ] |                         |                     |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 637

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 688

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46453

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 5-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Adenoma;Spleen Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 638

TRT#: 7

SEX: Male

DAY ON TEST: 453

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Compression

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 639

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 5-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
	Olfactory Epi	Metaplasia	Mild
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibrosarcoma	
[ Fibrosarcoma TGLS = 1-16+17+18+19 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9+14 ]			
* Urinary Bladder	Transit Epithe	Papilloma	
[ Papilloma TGLS = 4-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 640

TRT#: 7

SEX: Male

DAY ON TEST: 600

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mediastinal

OBSERVATIONS

* Brain		Compression	Mild
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-4 ]		
* Lymph Node, Mandibular		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-9 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-15 ]		
* Nose		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4,7-14+16 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 640	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46456

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 6-9 ]	Bilateral, Interstit Cell	Ulcer Adenoma	Marked
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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 641

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 677

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46457

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Moderate
* Eye	Cornea	Inflammation	Chronic, Minimal
* Heart	Ventricle	Hypertrophy	Marked
[ Hypertrophy TGLS = 2-17 ]			
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Mild
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Spleen		Accessory Spleen	
[ Accessory Spleen TGLS = 5-6 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 6-9 ]			
* Urinary Bladder	Transit Epithe	Papilloma	
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 1,3-15+16+14 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 641

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 677

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46457

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Heart Ventricle Hypertrophy

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 642

TRT#: 7

SEX: Male

DAY ON TEST: 515

DOSE: 1000 PPM

DISP: Natural Death

HISTO: 46458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Papilla	Leukemia Mononuclear Mineralization Nephropathy Leukemia Mononuclear	Minimal Mild
* Liver [ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung	Alveolus	Infiltration Cellular Leukemia Mononuclear Leukemia Mononuclear	Histiocyte, Mild
* Lymph Node, Bronchial [ Leukemia Mononuclear TGLS = 2-4 ]			
* Pituitary Gland [ Adenoma TGLS = 3-10 ]		Adenoma	
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Spleen [ Hemorrhage TGLS = 7-15 ] [ Leukemia Mononuclear TGLS = 4,5-6+14 ]		Hemorrhage Leukemia Mononuclear	Marked
* Testes	Interstit Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 642

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 515

**DOSE:** 1000 PPM

**DISP:** Natural Death

**HISTO:** 46458

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Hemorrhage

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Adenoma;Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 643

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
	Atrium	Thrombosis	Marked
* Kidney	Renal Tubule	Adenoma	
	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
[ Adenoma TGLS = 4-14 ]			
* Liver		Degeneration	Cystic, Marked
[ Degeneration TGLS = 5-6 ]			
* Nose	Glands, Respirat Epith	Dilatation	Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
		Ulcer	Marked
[ Ulcer TGLS = 6-15 ]			
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 643	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 729
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46459

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]	Interstit Cell	Hyperplasia	Marked
* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 644

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Moderate Mild
[ Adenoma TGLS = 7-15 ]			
* Larynx	Epiglottis	Inflammation Metaplasia	Suppurative, Minimal Squamous, Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[ Leukemia Mononuclear TGLS = 5-6 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Nose	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Hemorrhage	Marked
[ Hemorrhage TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Testes	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:29

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 644

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46460

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Atrophy TGLS = 3-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Moderate

Tongue

Epithelium

Hyperplasia

Mild

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[ Hyperplasia TGLS = 6-15 ]

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 645

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46461

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Islets, Pancreatic		Carcinoma	
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Marked
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Clear Cell Focus	
* Lung		Alveolar/Bronchiolar Carcinoma	
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-5 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-15+16 ]		
* Nose	Respirat Epith	Adenoma	Multiple
		Inflammation	Suppurative, Minimal
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland		Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3,4-9+14 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 645

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46461

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 646

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 624

HISTO: 46462

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Harderian Gland
* Heart	* Intestine Large, Colon	* Intestine Large, Rectum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Eye		Leukemia Mononuclear	
* Kidney		Leukemia Mononuclear	
	Papilla	Mineralization	Mild
		Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-15 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1,2-14 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 646

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 624

**DOSE:** 1000 PPM

**DISP:** Natural Death

**HISTO:** 46462

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 647

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* 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	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Renal Tubule	Hyperplasia	Mild
		Leukemia Mononuclear	
	Papilla	Mineralization	Marked
		Nephropathy	Marked
[ Nephropathy TGLS = 3-7 ]			
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
Mesentery		Necrosis	Marked
[ Necrosis TGLS = 6-15 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:29

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 647

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46463

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pancreas	Acinus	Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 648

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 667

HISTO: 46464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Heart		Cardiomyopathy	Mild
* Kidney		Leukemia Mononuclear	
		Lipoma	
	Papilla	Mineralization	Minimal
		Nephropathy	Mild
[ Lipoma TGLS = 6-7 ]			
* Liver		Degeneration	Cystic, Mild
		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Iliac	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-16 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-18 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 648	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 667
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46464

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Pituitary Gland		Adenoma	
		Hemorrhage	Marked
[ Hemorrhage TGLS = 2-10 ]			
* Skin	Subcut Tiss	Schwannoma Benign	
[ Schwannoma Benign TGLS = 3-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-17 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 649

TRT#: 7

DOSE: 1000 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 729

HISTO: 46465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Liver	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Brain		Compression	Marked
* Islets, Pancreatic		Adenoma	
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Moderate
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Hyperplasia	Basal Cell, Minimal
Peritoneum	Mesothelium	Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 1,2,3-9+14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 650

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 730

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46466

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Marked
	[ Nephropathy TGLS = 5-7 ]		
* Liver	Bile Duct	Hyperplasia	Moderate
* Lung		Alveolar/Bronchiolar Adenoma	
	Alveolar Epith	Hyperplasia	Mild
	[ Alveolar/Bronchiolar Adenoma TGLS = 6-14 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
	[ Keratoacanthoma TGLS = 1-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 101

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46367

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Skin		Hyperkeratosis	Mild
[ Hyperkeratosis TGLS = 4-14 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 102

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 674

HISTO: 46368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla        | * Bone Marrow              | * Brain                   | * Clitoral Gland            |
| * Esophagus              | * Eye                      | * Harderian Gland         | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Mammary Gland          | * Nose                     | * Ovary                   | * Pancreas                  |
| * Parathyroid Gland      | * Salivary Glands          | * Skin                    | * Spleen                    |
| * Stomach, Forestomach   | * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             |
| * Trachea                | * Urinary Bladder          | * Uterus                  |                             |

MISSING

- |                         |                          |                           |
|-------------------------|--------------------------|---------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
|-------------------------|--------------------------|---------------------------|

OBSERVATIONS

- |                                    |          |                  |                   |
|------------------------------------|----------|------------------|-------------------|
| * Adrenal Cortex                   |          | Hyperplasia      | Minimal           |
| * Bone                             | Vertebra | Osteosarcoma     |                   |
| [ Osteosarcoma TGLS = 7-14+15+17 ] |          |                  |                   |
| * Kidney                           | Pelvis   | Dilatation       | Mild              |
| [ Dilatation TGLS = 5-7 ]          |          | Nephropathy      | Minimal           |
| * Liver                            |          | Basophilic Focus |                   |
| * Lung                             |          | Osteosarcoma     | Metastatic (Bone) |
| [ Osteosarcoma TGLS = 9-18 ]       |          |                  |                   |
| * Lymph Node, Mesenteric           |          | Hemorrhage       | Moderate          |
| Mesentery                          |          | Necrosis         | Marked            |
| [ Necrosis TGLS = 6-16 ]           |          |                  |                   |
| * Pituitary Gland                  |          | Adenoma          |                   |
| [ Adenoma TGLS = 1,2-10 ]          |          |                  |                   |

PRIMARY CAUSE OF DEATH

- Bone Vertebra Osteosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 710

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46369

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Marked
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Marked
		Nephropathy	Minimal
* Liver		Fibrous Histiocytoma	Metastatic (Skin)
	[ Fibrous Histiocytoma TGLS = 7-6+15 ]		
* Lung		Fibrous Histiocytoma	Metastatic (Skin)
	[ Fibrous Histiocytoma TGLS = 2,4,5-4+5+14 ]		
* Ovary		Cyst	Marked
	[ Cyst TGLS = 6-9 ]		
* Pituitary Gland		Adenoma	
		Hemorrhage	Marked
	[ Adenoma TGLS = 9-10 ]		
	[ Hemorrhage TGLS = 9-10 ]		
Skeletal Muscle		Fibrous Histiocytoma	Metastatic (Skin)
	[ Fibrous Histiocytoma TGLS = 1-3 ]		
* Skin		Fibrous Histiocytoma	
	[ Fibrous Histiocytoma TGLS = 3,8-16+17+18 ]		
* Spleen		Fibrous Histiocytoma	Metastatic (Skin)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 103	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 710
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46369

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Fibrous Histiocytoma TGLS = 10-19 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland		Fibrous Histiocytoma	Metastatic (Skin)
[ Fibrous Histiocytoma TGLS = 1-3 ]			

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PRIMARY CAUSE OF DEATH	- Skin Fibrous Histiocytoma
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 104

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Natural Death

DAY ON TEST: 716

HISTO: 46370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Colon	* Islets, Pancreatic	* Kidney	* Larynx
* Liver	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Brain		Glioma Malignant	
* Intestine Large, Rectum		Sarcoma Stromal	Metastatic (Uterus)
* Lung	Alveolar Epith Bronchiole	Hyperplasia Inflammation Fibroadenoma	Mild Chronic, Marked Multiple
* Mammary Gland			
[ Fibroadenoma TGLS = 1,2+14+15+16 ]			
* Pituitary Gland		Cyst Hyperplasia	Marked Moderate
[ Cyst TGLS = 4-10 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular		Erosion	Mild
[ Erosion TGLS = 7-10 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 3-3 ]			
* Uterus		Sarcoma Stromal	
[ Sarcoma Stromal TGLS = 6-17+18+19 ]			

PRIMARY CAUSE OF DEATH

- Uterus Sarcoma Stromal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 105

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 732  
**HISTO:** 46371

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose	Turbinate	Chondroma	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 106

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 547

HISTO: 46372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Minimal
* Larynx		Foreign Body	Marked
* Liver		Vacuolization Cytoplasmic	Marked
		[ Vacuolization Cytoplasmic TGLS = 2,3-6 ]	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 5-15 ]	
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 4-10 ]	
Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Ulcer	Marked
		[ Ulcer TGLS = 6-14 ]	
* Thyroid Gland		Ultimobranchial Cyst	Minimal
* Uterus		Polyp Stromal	
		[ Polyp Stromal TGLS = 1-10 ]	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 106

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 547  
**HISTO:** 46372

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH - Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 558

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Vacuolization Cytoplasmic	Moderate
* Lung	Alveolar Epith	Hyperplasia	Marked
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-14 ]			
* Pituitary Gland		Cyst	Marked
[ Cyst TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH - Mammary Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Cyst

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 108

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 660

HISTO: 46374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex  
\* Brain  
\* Harderian Gland  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Pancreas  
\* Stomach, Forestomach  
\* Trachea

\* Adrenal Medulla  
\* Clitoral Gland  
\* Heart  
\* Intestine Small, Duodenum  
\* Larynx  
\* Parathyroid Gland  
\* Stomach, Glandular  
\* Uterus

\* Bone  
\* Esophagus  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Nose  
\* Salivary Glands  
\* Thymus

\* Bone Marrow  
\* Eye  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Ovary  
\* Skin  
\* Thyroid Gland

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

\* Lymph Node, Mediastinal

OBSERVATIONS

\* Kidney  
\* Liver

Nephropathy  
Basophilic Focus  
Clear Cell Focus  
Leukemia Mononuclear

Minimal

[ Leukemia Mononuclear TGLS = 3-6 ]

\* Lung  
\* Lymph Node, Mesenteric

Alveolus

Infiltration Cellular  
Hemorrhage

Histiocyte, Minimal  
Moderate

[ Hemorrhage TGLS = 5-8 ]

\* Mammary Gland

Fibroadenoma

[ Fibroadenoma TGLS = 1-14 ]

\* Pituitary Gland

Cyst

Marked

[ Cyst TGLS = 2-10 ]

Pleura

Inflammation

Chronic, Minimal

\* Spleen

Leukemia Mononuclear

\* Urinary Bladder

Leiomyosarcoma

[ Leiomyosarcoma TGLS = 4-15+16 ]

PRIMARY CAUSE OF DEATH

- Urinary Bladder Leiomyosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 109

TRT#: 2

SEX: Female

DAY ON TEST: 662

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* 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	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Inflammation	Chronic, Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
[ Clear Cell Focus TGLS = 5-16 ]			
* Mammary Gland		Carcinoma	
		Fibroadenoma	Multiple
[ Carcinoma TGLS = 4-17 ]			
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 110

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 485

HISTO: 46376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Brain	Medulla, Meninges	Inflammation	Suppurative, Mild
* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Moderate
	Cornea	Inflammation	Suppurative, Marked
	[ Inflammation TGLS = 3-13 ]		
* Liver		Vacuolization Cytoplasmic	Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Suppurative, Minimal
* Lymph Node, Bronchial		Ectasia	Marked
		Inflammation	Mild
	[ Ectasia TGLS = 1-4 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-16 ]		
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Hyperplasia	Marked
	[ Hyperplasia TGLS = 4-10 ]		
Zymbal's Gland		Carcinoma	
	[ Carcinoma TGLS = 2-14+15 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 110

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 485

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46376

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 111

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 3-7 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 112

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 2-17 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 113

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Eye	Lens	Cataract	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Bronchial		Ectasia	Mild
[ Ectasia TGLS = 1-3 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-18 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2,5-17 ]			
* Nose	Glands, Respirat Epith	Dilatation	Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 113

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46379

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 114

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 5-14 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	Multiple
[ Carcinoma TGLS = 4-14,2-15,3-16 ]			
* Ovary		Cyst	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 115

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
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OBSERVATIONS

* Clitoral Gland		Hyperplasia	Moderate
* Kidney	Renal Tubule	Cyst Nephropathy	Mild
[ Cyst TGLS = 5-14 ]			
* Liver		Basophilic Focus Clear Cell Focus	
[ Clear Cell Focus TGLS = 3,4-6+14 ]			
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Carcinoma Galactocele	Marked
[ Carcinoma TGLS = 1-15+16 ]			
[ Galactocele TGLS = 2-17 ]			
* Nose	Nasolacrim Dct	Inflammation Inflammation	Suppurative, Moderate Suppurative, Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 115

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 732  
**HISTO:** 46381

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 116

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 618

HISTO: 46382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Renal Tubule	Pigmentation	Marked
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Marked
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitial	Fibrosis	Mild
		Inflammation	Chronic, Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-4 ]			
* Pituitary Gland		Hyperplasia	Mild
[ Hyperplasia TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 117

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 1-9+16 ]		Hyperplasia	Marked
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Minimal
* Larynx		Inflammation	Suppurative, Mild
* Liver  [ Hepatodiaphragmatic Nodule TGLS = 5-15 ]		Basophilic Focus Clear Cell Focus Hepatodiaphragmatic Nodule	Marked
* Lung Alveolus		Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 3-18 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 2-17 ]		Necrosis	Moderate
Pleura		Inflammation	Chronic, Minimal
* Uterus [ Polyp Stromal TGLS = 6-15 ]		Polyp Stromal	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 118

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 705

HISTO: 46384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Marked
* Eye	Bilateral, Retina	Atrophy	Moderate
	Bilateral, Lens	Cataract	Marked
[ Cataract TGLS = 1-13 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Ulcer	Mild
[ Ulcer TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 119

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Natural Death

DAY ON TEST: 688

HISTO: 46385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Clitoral Gland [ Carcinoma TGLS = 3-15 ]		Carcinoma	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Mild
* Mammary Gland [ Fibroadenoma TGLS = 1,3-14+15 ]		Fibroadenoma	Multiple
* Pituitary Gland [ Adenoma TGLS = 2-10 ]		Adenoma	
		Hemorrhage	Marked
Pleura		Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 120

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 635

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46386

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Brain		Compression	Marked
* Eye	Retina	Atrophy	Minimal
	Lens	Cataract	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Inflammation	Granulomatous, Mild
* Mammary Gland		Fibroadenoma	
		Hyperplasia	Mild
		[ Fibroadenoma TGLS = 4-16 ]	
		[ Hyperplasia TGLS = 3-14 ]	
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 2-15 ]	
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 1-10 ]	

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 121

TRT#: 2

SEX: Female

DAY ON TEST: 596

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Nephropathy	Minimal
* Liver	Vacuolization Cytoplasmic	Moderate
[ Vacuolization Cytoplasmic TGLS = 3-6 ]		
Mesentery	Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 2-10 ]		
* Stomach, Forestomach	Ulcer	Marked
[ Ulcer TGLS = 5-10+15 ]		

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma  
 CONTRIBUTORY CAUSE OF DEATH - Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 122

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 676

HISTO: 46388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Moderate
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Alveolar/Bronchiolar Carcinoma	
		Leukemia Mononuclear	
[ Alveolar/Bronchiolar Carcinoma TGLS = 3-15 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-16 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 123

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Natural Death

DAY ON TEST: 374

HISTO: 46389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Medulla  
\* Clitoral Gland  
\* Heart  
\* Kidney  
\* Lymph Node, Mediastinal  
\* Ovary  
\* Skin  
\* Thyroid Gland

\* Bone  
\* Esophagus  
\* Intestine Large, Colon  
\* Larynx  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Spleen  
\* Trachea

\* Bone Marrow  
\* Eye  
\* Intestine Large, Rectum  
\* Liver  
\* Mammary Gland  
\* Parathyroid Gland  
\* Stomach, Glandular  
\* Urinary Bladder

\* Brain  
\* Harderian Gland  
\* Islets, Pancreatic  
\* Lung  
\* Nose  
\* Salivary Glands  
\* Thymus  
\* Uterus

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

\* Intestine Large, Cecum

\* Intestine Small, Duodenum

\* Intestine Small, Ileum

\* Intestine Small, Jejunum

OBSERVATIONS

\* Adrenal Cortex  
Mesentery  
[ Necrosis TGLS = 2-7 ]  
\* Pituitary Gland  
\* Stomach, Forestomach  
Vagina  
[ Polyp TGLS = 1-14 ]

Necrosis  
Necrosis  
Hyperplasia  
Ulcer  
Polyp

Mild  
Moderate  
Mild  
Mild

PRIMARY CAUSE OF DEATH

- Vagina Polyp

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 124

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 716  
**HISTO:** 46390

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Moderate
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung		Hemorrhage	Moderate
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 3,5-15+16 ]			
[ Leukemia Mononuclear TGLS = 4-5 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-15 ]			
[ Leukemia Mononuclear TGLS = 1-17 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-16 ]			
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 12-17 ]			
* Pituitary Gland		Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:29

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 124

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 716

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46390

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 6-10 ]		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8,10-14 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Uterus	Endometrium	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear	

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 125

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Vacuolization Cytoplasmic	Moderate
[ Vacuolization Cytoplasmic TGLS = 3-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-7 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 125

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46391

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 126

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Carcinoma TGLS = 2,4-14+15 ]		Carcinoma	Multiple
* Eye [ Cataract TGLS = 1-13 ]	Retina Lens	Atrophy Cataract	Moderate Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy	Moderate Mild
* Larynx		Inflammation	Suppurative, Mild
* Liver		Basophilic Focus Leukemia Mononuclear	
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 7-7 ]		Fibroadenoma	
* Pituitary Gland [ Adenoma TGLS = 6-10 ]		Adenoma	
Pleura [ Inflammation TGLS = 3-5 ]		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 126

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46392

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Polyp Stromal TGLS = 5-10 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 127

TRT#: 2

SEX: Female

DAY ON TEST: 519

DOSE: CONTROL

DISP: Natural Death

HISTO: 46393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex  
\* Clitoral Gland  
\* Heart  
\* Lung  
\* Ovary  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Esophagus  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Stomach, Forestomach  
\* Trachea

\* Bone  
\* Eye  
\* Kidney  
\* Mammary Gland  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone Marrow  
\* Harderian Gland  
\* Larynx  
\* Nose  
\* Skin  
\* Thymus  
\* Uterus

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

\* Lymph Node, Mediastinal

\* Parathyroid Gland

AUTO PRECLUDES DIAG.

\* Intestine Large, Cecum  
\* Intestine Small, Ileum

\* Intestine Large, Colon  
\* Intestine Small, Jejunum

\* Intestine Large, Rectum

\* Intestine Small, Duodenum

OBSERVATIONS

\* Brain  
\* Liver  
\* Pituitary Gland

Compression  
Basophilic Focus  
Adenoma  
Cyst

Moderate

Minimal

[ Adenoma TGLS = 2-10 ]

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Compression

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 128

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-17+18 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-7 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 129

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
	Periportal	Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]	Vacuolization Cytoplasmic	Mild
* Lung		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-14 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]	Cyst	Moderate
Pleura		Inflammation	Chronic, Mild
* Uterus		Polyp Stromal	
	[ Polyp Stromal TGLS = 2-7 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 130

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-17 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 131

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
-------------------------	--------------------------

OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Inflammation	Chronic, Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Nose		Inflammation	Chronic, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 1-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 132

TRT#: 2

SEX: Female

DAY ON TEST: 492

DOSE: CONTROL

DISP: Natural Death

HISTO: 46398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                            |                          |                           |
|-----------------------------|----------------------------|--------------------------|---------------------------|
| * Adrenal Medulla           | * Bone                     | * Bone Marrow            | * Brain                   |
| * Clitoral Gland            | * Esophagus                | * Eye                    | * Harderian Gland         |
| * Heart                     | * Intestine Large, Cecum   | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic     | * Larynx                  |
| * Mammary Gland             | * Nose                     | * Ovary                  | * Pancreas                |
| * Parathyroid Gland         | * Salivary Glands          | * Skin                   | * Stomach, Glandular      |
| * Thymus                    | * Thyroid Gland            | * Trachea                | * Urinary Bladder         |
| * Uterus                    |                            |                          |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

AUTO PRECLUDES DIAG.

- \* Intestine Small, Ileum

OBSERVATIONS

- |                                     |                        |                           |          |
|-------------------------------------|------------------------|---------------------------|----------|
| * Adrenal Cortex                    |                        | Necrosis                  | Moderate |
| * Kidney                            | Pelvis, Transit Epithe | Mineralization            | Minimal  |
|                                     |                        | Nephropathy               | Minimal  |
| * Liver                             |                        | Leukemia Mononuclear      |          |
|                                     |                        | Vacuolization Cytoplasmic | Mild     |
| * Lung                              |                        | Leukemia Mononuclear      |          |
| Lymph Node                          | Pancreatic             | Leukemia Mononuclear      |          |
| * Lymph Node, Mediastinal           |                        | Leukemia Mononuclear      |          |
| [ Leukemia Mononuclear TGLS = 3-3 ] |                        |                           |          |
| * Lymph Node, Mesenteric            |                        | Leukemia Mononuclear      |          |
| * Pituitary Gland                   |                        | Hyperplasia               | Moderate |
| * Spleen                            |                        | Leukemia Mononuclear      |          |
| * Stomach, Forestomach              | Epithelium             | Hyperplasia               | Minimal  |

PRIMARY CAUSE OF DEATH

- Pituitary Gland Hyperplasia

CONTRIBUTORY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 133

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 716  
**HISTO:** 46399

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Medulla [ Pheochromocytoma Complex TGLS = 6-7 ]		Pheochromocytoma Complex	
* Brain		Compression	Marked
		Hemorrhage	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Minimal
* Liver [ Clear Cell Focus TGLS = 5-6 ]		Clear Cell Focus	
* Mammary Gland [ Fibroadenoma TGLS = 3,4-9+14+15 ]		Fibroadenoma	Multiple
* Pituitary Gland [ Adenoma TGLS = 2-10 ]		Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma  
**CONTRIBUTORY CAUSE OF DEATH** - Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 134

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 613

HISTO: 46400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Necrosis Oligodendroglioma Malignant	Marked
[ Necrosis TGLS = 3-1 ]			
[ Oligodendroglioma Malignant TGLS = 3-1 ]			
* Larynx		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Brain Oligodendroglioma Malignant

CONTRIBUTORY CAUSE OF DEATH - Brain Necrosis

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 135

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
		[ Fibroadenoma TGLS = 1-14+15 ]	
* Nose	Olfactory Epi	Degeneration	Hyaline, Minimal
	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 2-10 ]	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 136

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 702

HISTO: 46402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex	Hyperplasia	Marked
	Vacuolization Cytoplasmic	Marked
* Brain	Compression	Marked
* Kidney	Nephropathy	Minimal
* Liver	Basophilic Focus	
* Mammary Gland	Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 2-10 ]		
Pleura	Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell Hyperplasia	Marked

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 137

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Brain		Compression	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	Multiple
		Galactocele	Marked
[ Carcinoma TGLS = 1,2-17+18 ]			
[ Galactocele TGLS = 4-7 ]			
* Nose	Globet Cell	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
* Uterus		Hemorrhage	Marked
	Endometrium	Hyperplasia	Mild
		Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 137

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 46403

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Polyp Stromal TGLS = 5-19 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 138

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 501

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 46404

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Brain		Compression	Moderate
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 2-15 ]			
* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 5-14 ]			
* Lung		Hemorrhage	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen	Capsule	Fibrosis	Mild
[ Fibrosis TGLS = 4-14 ]			

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 139

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Larynx	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Islets, Pancreatic [ Carcinoma TGLS = 3-6 ]		Carcinoma	
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
* Mammary Gland [ Carcinoma TGLS = 2-14 ]		Carcinoma	
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland		Cyst	Moderate
		Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Mild
* Uterus	Endometrium	Hyperplasia	Mild
		Polyp Stromal	
[ Polyp Stromal TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 140

TRT#: 2

SEX: Female

DAY ON TEST: 663

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Brain		Carcinoma	Metastatic (Pituitary Gland)
		Compression	Marked
	[ Carcinoma TGLS = 3-1 ]		
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
	[ Clear Cell Focus TGLS = 2-6 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-14 ]		
* Nose	Nasolacrim Dct	Inflammation	Chronic, Moderate
* Pituitary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-10 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 141

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 46407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Harderian Gland		Inflammation	Chronic, Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
Vagina	Epithelium	Hyperplasia	Adenomatous, Marked
	Epithelium	Polyp	
[ Hyperplasia TGLS = 3-7 ]			
[ Polyp TGLS = 3-7 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 142

TRT#: 2

SEX: Female

DAY ON TEST: 628

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Brain
- \* Harderian Gland
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Spleen
- \* Thyroid Gland

- \* Adrenal Medulla
- \* Clitoral Gland
- \* Heart
- \* Intestine Small, Duodenum
- \* Larynx
- \* Nose
- \* Pituitary Gland
- \* Stomach, Forestomach
- \* Trachea

- \* Bone
- \* Esophagus
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lung
- \* Ovary
- \* Salivary Glands
- \* Stomach, Glandular
- \* Urinary Bladder

- \* Bone Marrow
- \* Eye
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mediastinal
- \* Pancreas
- \* Skin
- \* Thymus
- \* Uterus

MISSING

- \* Lymph Node, Bronchial

- \* Lymph Node, Mandibular

OBSERVATIONS

- \* Kidney
- \* Liver
- \* Mammary Gland

Papilla

Mineralization  
 Basophilic Focus  
 Fibroadenoma

Minimal

[ Fibroadenoma TGLS = 1-14+15 ]

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 143

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Nephropathy	Mild
* Liver	Basophilic Focus	
* Mammary Gland	Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,3-14+15 ]		
Mesentery	Necrosis	Moderate
[ Necrosis TGLS = 2-7 ]		
* Pituitary Gland	Hyperplasia	Mild
* Thyroid Gland	C Cell Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 144

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	
		Galactocele	Minimal
	[ Fibroadenoma TGLS = 1-14+15 ]		
* Pituitary Gland		Cyst	Marked
		Hyperplasia	Marked
	[ Hyperplasia TGLS = 2-10 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 145

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Angiectasis	Moderate
		Basophilic Focus	
[ Angiectasis TGLS = 2-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
* Uterus	Endometrium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 146

TRT#: 2

SEX: Female

DAY ON TEST: 716

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 46412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Foreign Body	Marked
* Liver		Basophilic Focus	
		Vacuolization Cytoplasmic	Moderate
	[ Vacuolization Cytoplasmic TGLS = 2,3-6 ]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Olfactory Epi	Degeneration	Hyaline, Mild
	Respirat Epith	Degeneration	Hyaline, Minimal
* Pituitary Gland		Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 147

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland		Adenoma	
		Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-3 ]			
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 148

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Natural Death

DAY ON TEST: 722

HISTO: 46414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Harderian Gland	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Adrenal Cortex [ Hemorrhage TGLS = 7-7 ]		Hemorrhage	Moderate
* Adrenal Medulla [ Pheochromocytoma Malignant TGLS = 8-7 ]		Pheochromocytoma Malignant	
* Eye [ Cataract TGLS = 9-13 ]	Lens	Cataract	Moderate
* Kidney		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Mammary Gland [ Carcinoma TGLS = 3-16+17 ] [ Fibroadenoma TGLS = 1,2-14+15 ]		Carcinoma Fibroadenoma	Multiple
Mesentery [ Necrosis TGLS = 6-15 ]		Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 10-10 ]		Adenoma	
* Spleen		Leukemia Mononuclear	
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 148

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 722  
**HISTO:** 46414

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus  
[ Polyp Stromal TGLS = 5-10 ]

Polyp Stromal

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PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 149

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 718  
**HISTO:** 46415

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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**OBSERVATIONS**

* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Marked
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Inflammation	Chronic, Mild
* Mammary Gland		Carcinoma	
		Fibroadenoma	
	[ Carcinoma TGLS = 2-15 ]		
	[ Fibroadenoma TGLS = 1-14 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
Pleura		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 5-5 ]		
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 149

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 718  
**HISTO:** 46415

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 150

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 668  
**HISTO:** 46416

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Brain		Compression	Marked
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
[ Clear Cell Focus TGLS = 3-6 ]			
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-10 ]			
Pleura		Inflammation	Chronic, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 301

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46667

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Eye	Retina	Atrophy	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Carcinoma TGLS = 2-15 ]			
[ Fibroadenoma TGLS = 1-16+17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose		Inflammation	Suppurative, Marked
* Pituitary Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 4-10 ]			
* Skin		Ulcer	Marked
* Spleen		Hematopoietic Cell Proliferation	Marked
		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 301

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46667

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 302

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 697

HISTO: 46668

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Brain		Compression	Moderate
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
		Necrosis	Mild
	[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]		
	[ Necrosis TGLS = 3-6 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 303

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46669

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Basophilic Focus	
		Vacuolization Cytoplasmic	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-14+15 ]			
* Nose	Respirat Epith	Adenoma	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Marked
[ Hyperplasia TGLS = 4-16 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 304

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46670

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Vacuolization Cytoplasmic	Moderate
* Clitoral Gland		Cyst	Moderate
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Clear Cell Focus	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 305

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46671

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,5-14+15 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
* Pituitary Gland		Hyperplasia	Marked
* Spleen		Leukemia Mononuclear	
Tongue	Epithelium	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-16 ]			
* Uterus	Endometrium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 306

TRT#: 4

SEX: Female

DAY ON TEST: 702

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46672

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
[ Clear Cell Focus TGLS = 4,5,6-6 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Marked
[ Ulcer TGLS = 7-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth	Peridont Tiss	Inflammation	Marked

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 307

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 688

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46673

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Uterus			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Pituitary Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 2-10 ]		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,6-14 ]			
* Thyroid Gland	C Cell	Adenoma	
* Urinary Bladder	Transit Epithe	Hyperplasia	Moderate

Note: hyperplasia in submucosal conn tissue, not muscularis.

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 308

**TRT#:** 4  
**DOSE:** 250 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 562  
**HISTO:** 46674

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* 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	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Brain		Carcinoma	Metastatic (Pituitary Gland)
[ Carcinoma TGLS = 5-1 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Larynx	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Suppurative, Moderate
* Liver		Clear Cell Focus	
		Vacuolization Cytoplasmic	Moderate
[ Vacuolization Cytoplasmic TGLS = 3-14 ]			
* Pituitary Gland		Carcinoma	
[ Carcinoma TGLS = 2-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Marked
[ Ulcer TGLS = 4-10 ]			

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Carcinoma  
**CONTRIBUTORY CAUSE OF DEATH** - Brain Carcinoma Pituitary Gland;Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 309

**TRT#:** 4  
**DOSE:** 250 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 673  
**HISTO:** 46675

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Brain		Compression Meningioma Benign	Moderate
Note: Diff dx is pituitary tumor extending into brain Note: PAS is negative for granular cell tumor.			
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Adenoma	Minimal Mild
* Liver			
* Mammary Gland			
[ Adenoma TGLS = 3-14 ]			
* Ovary		Cyst	Moderate
[ Cyst TGLS = 4-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 310

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46676

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Pituitary Gland		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tooth	Peridont Tiss	Inflammation	Moderate
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 311

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46677

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Minimal
* Pituitary Gland		Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 3-5 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tongue	Epithelium	Hyperplasia	Marked
[ Hyperplasia TGLS = 1-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 312

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 591

HISTO: 46678

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Heart	Atrium	Thrombosis	Mild
* Liver		Clear Cell Focus	
		Leukemia Mononuclear	
		[ Clear Cell Focus TGLS = 2-6 ]	
		[ Leukemia Mononuclear TGLS = 2-6 ]	
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-6 ]	
* Uterus	Endometrium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 313

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-14 ]			
* Nose		Foreign Body	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 314

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46680

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	[ Basophilic Focus TGLS = 3-6 ]		
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Inflammation	Chronic, Minimal
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 2-14 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
		Cyst	Moderate
	[ Adenoma TGLS = 4-10 ]		
	[ Cyst TGLS = 4-10 ]		
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-6 ]		
* Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 314

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46680

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 315

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46681

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung	Mediastinum	Carcinoma	Metastatic (Uterus)
		Carcinoma	Metastatic (Uterus)
	Alveolar Epith	Hyperplasia	Minimal
[ Carcinoma TGLS = 2-4+5 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-15 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
		Hyperplasia	Marked
[ Hyperplasia TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Carcinoma	
[ Carcinoma TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 316

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46682

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-16 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-4 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 7-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 316

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46682

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 317

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Clitoral Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-15 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lymph Node, Bronchial		Hyperplasia	Lymphoid, Moderate
[ Hyperplasia TGLS = 5-4 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-17 ]			
Pleura		Inflammation	Chronic, Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 318

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46684

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Hemorrhage	Mild
		Thrombosis	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Bronchiole	Hyperplasia	Mild
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-4 ]			
* Mammary Gland		Carcinoma	Multiple
		Inflammation	Suppurative, Marked
[ Carcinoma TGLS = 1,2-14+15+16 ]			
[ Inflammation TGLS = 1,2-15+16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Skin	Subcut Tiss	Inflammation	Suppurative, Marked
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 318

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46684

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:29

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 319

TRT#: 4

SEX: Female

DAY ON TEST: 670

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46685

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Marked
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,5-14+16 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Ulcer	Marked
	[ Ulcer TGLS = 4-15 ]		

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 320

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46686

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]	
		[ Leukemia Mononuclear TGLS = 3-6 ]	
* Lung	Bronchiole	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
		[ Fibroadenoma TGLS = 1,6-15+16 ]	
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 5-14 ]	
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
		[ Hyperplasia TGLS = 2-10 ]	
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 320

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46686

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 321

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 571

HISTO: 46687

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Colon	* Intestine Large, Rectum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Bronchial
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Nose			

OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
[ Clear Cell Focus TGLS = 7-6 ]			
* Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 9-8 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 8-16 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Skin	Sebaceous Gl	Hemorrhage	Moderate
[ Hemorrhage TGLS = 10-17 ]			
* Thyroid Gland	Follicular Cel	Adenoma	
[ Adenoma TGLS = 3-3 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 321

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 571

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46687

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 322

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 717

HISTO: 46688

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland	
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OBSERVATIONS

* Clitoral Gland		Cyst	Moderate
		Hyperplasia	Moderate
[ Cyst TGLS = 1-9 ]			
[ Hyperplasia TGLS = 1-9 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Hemorrhage	Minimal
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-7 ]			
* Nose	Goblet Cell	Foreign Body	
		Hyperplasia	Marked
		Inflammation	Chronic, Moderate
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-9 ]			
* Pituitary Gland		Adenoma	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Uterus	Endometrium	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:29

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 322

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 717

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46688

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**ORGAN AND ACCOUNTABLE SITE STATUS**

Polyp Stromal

[ Polyp Stromal TGLS = 3-10 ]

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**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 323

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46689

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Marked
[ Cataract TGLS = 1-13 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Mammary Gland		Carcinoma	
		Fibroadenoma	Multiple
[ Carcinoma TGLS = 3-17+18 ]			
[ Fibroadenoma TGLS = 4,5-14+15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-16 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 7-10 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 323

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46689

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 324

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 660

HISTO: 46690

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Mediastinal
* Mammary Gland	* Ovary	* Salivary Glands	* Skin
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Thymus
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OBSERVATIONS

* Kidney		Leukemia Mononuclear Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lymph Node, Mesenteric		Infiltration Cellular Leukemia Mononuclear	Histiocyte, Marked
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas		Fibrosis	Marked
* Parathyroid Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-3 ]			
* Pituitary Gland		Adenoma Hemorrhage	Marked
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 325

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46691

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Eye	Lens	Cataract	Mild
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung	Bronchiole	Hyperplasia	Moderate
	Bronchiole	Inflammation	Chronic, Moderate
		Inflammation	Chronic, Moderate
	[ Inflammation TGLS = 5-5 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 3-17 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibroma	
		Hyperkeratosis	Moderate
	[ Fibroma TGLS = 2-15+16 ]		
	[ Hyperkeratosis TGLS = 1-14 ]		
* Uterus		Polyp Stromal	
	[ Polyp Stromal TGLS = 4-18 ]		

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 325

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46691

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 326

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46692

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 6-5 ]		
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-15+16 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-14 ]		
* Ovary		Cyst	Marked
	[ Cyst TGLS = 3-9 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Pleura		Inflammation	Chronic, Mild
* Skin		Cyst Epithelial Inclusion	Marked
* Uterus		Polyp Stromal	
	[ Polyp Stromal TGLS = 4-10 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 326

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 250 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46692

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 327

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46693

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Nose	Respirat Epith	Adenoma	
Note: very photogenic nasal adenoma			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura	Mesothelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 328

**TRT#:** 4  
**DOSE:** 250 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 635  
**HISTO:** 46694

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Brain		Carcinoma	Metastatic (Pituitary Gland)
		Compression	Marked
* Kidney		Nephropathy	Minimal
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 5,6-6 ]			
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,3-14+15 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 4-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Erosion	Moderate
	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 329

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46695

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Suppurative, Moderate
* Pituitary Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 3-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 330

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46696

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex	Vacuolization Cytoplasmic	Mild
* Kidney	Nephropathy	Minimal
* Liver	Basophilic Focus	
	Leukemia Mononuclear	
* Lung	Inflammation	Chronic, Minimal
* Mammary Gland	Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]		
Mesentery	Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 2-10 ]		
Pleura	Inflammation	Chronic, Minimal
* Spleen	Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 331

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 514

HISTO: 46697

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Bone	Cranium	Osteosarcoma	
[ Osteosarcoma TGLS = 2-14 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-15 ]			
* Pituitary Gland		Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Bone Cranium Osteosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 332

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46698

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Thymus
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OBSERVATIONS

* Brain		Compression	Moderate
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-15 ]			
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose	Respirat Epith	Adenoma	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 333

TRT#: 4

SEX: Female

DAY ON TEST: 536

DOSE: 250 PPM

DISP: Natural Death

HISTO: 46699

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Brain
- \* Harderian Gland
- \* Larynx
- \* Mammary Gland
- \* Parathyroid Gland
- Spinal Cord
- \* Thymus
- \* Uterus

- \* Adrenal Medulla
- \* Clitoral Gland
- \* Heart
- \* Lung
- \* Nose
- Peripheral Nerve
- \* Spleen
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Islets, Pancreatic
- \* Lymph Node, Mediastinal
- \* Ovary
- \* Salivary Glands
- \* Stomach, Forestomach
- \* Trachea

- \* Bone Marrow
- \* Eye
- \* Kidney
- \* Lymph Node, Mesenteric
- \* Pancreas
- \* Skin
- \* Stomach, Glandular
- \* Urinary Bladder

MISSING

- \* Lymph Node, Bronchial

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- \* Intestine Large, Cecum
- \* Intestine Small, Ileum

- \* Intestine Large, Colon
- \* Intestine Small, Jejunum

- \* Intestine Large, Rectum

- \* Intestine Small, Duodenum

OBSERVATIONS

- \* Liver
- \* Pituitary Gland

- Basophilic Focus
- Adenoma
- Cyst

Marked

[ Adenoma TGLS = 1-10 ]

[ Cyst TGLS = 1-10 ]

PRIMARY CAUSE OF DEATH

- Pituitary Gland Cyst

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 334

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 16

HISTO: 46700

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Islets, Pancreatic	* Kidney
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Liver	Centrilobular	Congestion	Marked
		Hepatodiaphragmatic Nodule	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Animal Note: possible pcod: HDN>>blockage of venous blood flow in postcava>>hepatic congesti on>>death

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 335

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46701

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Marked
[ Hyperplasia TGLS = 5-16 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 336

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 704

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46702

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Marked
* Brain		Compression	Moderate
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 6-6 ]		
	[ Leukemia Mononuclear TGLS = 7-6 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
	[ Leukemia Mononuclear TGLS = 2-14 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-3 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 10-16 ]		
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 1-15 ]		
* Pituitary Gland		Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:29

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 336

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 704

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46702

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 9-10 ]

\* Skin

Subcut Tiss

Schwannoma Benign

[ Schwannoma Benign TGLS = 8-15 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 5-14 ]

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 337

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46703

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-14 ]		
* Nose		Inflammation	Chronic, Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 338

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46704

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Mediastinal
* Ovary	* Pancreas	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Leukemia Mononuclear	Minimal Mild
* Liver		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland [ Carcinoma TGLS = 2-14+15 ]		Carcinoma	
* Nose	Respirat Epith Olfactory Epi	Adenoma Hyperplasia Adenoma	Basal Cell, Minimal
* Pituitary Gland [ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 339

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 696

HISTO: 46705

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Clitoral Gland		Hyperplasia Inflammation	Marked Chronic, Marked
[ Hyperplasia TGLS = 1-9 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Clear Cell Focus	Minimal Minimal
* Liver			
[ Clear Cell Focus TGLS = 2-6 ]			
* Lung		Inflammation	Chronic, Minimal
* Nose	Goblet Cell Olfactory Epi	Hyperplasia Inflammation Inflammation	Moderate Granulomatous, Moderate Chronic, Mild
	Olfactory Epi Respirat Epith	Metaplasia Metaplasia	Moderate Squamous, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Uterus	Cervix	Polyp Stromal	
[ Polyp Stromal TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 339

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 696

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46705

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 340

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 547

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46706

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex	Vacuolization Cytoplasmic	Marked
* Bone	Hyperostosis	Marked
[ Hyperostosis TGLS = 11-17 ]		
* Kidney	Leukemia Mononuclear	
* Liver	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung	Leukemia Mononuclear	
* Lymph Node, Bronchial	Leukemia Mononuclear	
* Lymph Node, Mediastinal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]		
* Lymph Node, Mesenteric	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-15 ]		
Mesentery	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-16 ]		
* Pituitary Gland	Hyperplasia	Mild
	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-10 ]		
* Spleen	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 340	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 547
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46706

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Stomach, Forestomach	Epithelium	Hyperplasia Leukemia Mononuclear	Moderate
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[ Leukemia Mononuclear TGLS = 8-10 ]

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 341

TRT#: 4

SEX: Female

DAY ON TEST: 663

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46707

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Brain		Compression	Marked
		Hemorrhage	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Moderate
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-9 ]			
* Pituitary Gland		Adenoma	
		Hemorrhage	Marked
[ Adenoma TGLS = 1-10 ]			
[ Hemorrhage TGLS = 1-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Hemorrhage

CONTRIBUTORY CAUSE OF DEATH - Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 342

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 716

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46708

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Bone \* Stomach, Forestomach

**AUTO PRECLUDES DIAG.**

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

**OBSERVATIONS**

* Heart [ Thrombosis TGLS = 4-6 ]	Atrium	Thrombosis	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy	Mild Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 1-14 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 1-14 ]		Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 5-10 ]		Adenoma	
* Skin [ Fibroma TGLS = 2-15+16 ]	Subcut Tiss	Fibroma	
* Spleen		Leukemia Mononuclear	

**PRIMARY CAUSE OF DEATH** - Heart Atrium Thrombosis  
**CONTRIBUTORY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 343

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 655

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46709

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mandibular	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mediastinal
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**AUTO PRECLUDES DIAG.**

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

**OBSERVATIONS**

* Brain		Compression	Marked
		Hemorrhage	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Nose	Goblet Cell	Hyperplasia	Moderate
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas		Hemorrhage	Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:29  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 343

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 655

**DOSE:** 250 PPM

**DISP:** Natural Death

**HISTO:** 46709

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 344

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 628

HISTO: 46710

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Clitoral Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 4-15 ]			
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,4-14+15 ]			
* Pituitary Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 3-10 ]			
* Skin		Ulcer	Marked
[ Ulcer TGLS = 4-15 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Skin Ulcer

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:29

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 345

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46711

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Salivary Glands	* Skin
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 2-16 ]		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Leukemia Mononuclear	Mild Minimal
* Liver		Carcinoma Fibroadenoma	
* Mammary Gland [ Carcinoma TGLS = 3-14-15 ] [ Fibroadenoma TGLS = 1-16 ]			
* Ovary [ Cyst TGLS = 7-9 ]		Cyst	Marked
* Pituitary Gland [ Adenoma TGLS = 4-10 ]		Adenoma	
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus	Endometrium	Hemorrhage Hyperplasia	Marked Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 345	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 250 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46711

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Polyp Stromal TGLS = 5,6-17 ]	Polyp Stromal	Multiple
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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 346

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 250 PPM

DISP: Terminal Sacrifice

HISTO: 46712

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
* Nose	Olfactory Epi	Degeneration	Hyaline, Mild
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 347

TRT#: 4

SEX: Female

DAY ON TEST: 598

DOSE: 250 PPM

DISP: Moribund Sacrifice

HISTO: 46713

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Brain		Compression	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Vacuolization Cytoplasmic	Marked
	[ Vacuolization Cytoplasmic TGLS = 4,5-6+14 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 3-14 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Ulcer	Marked
	[ Ulcer TGLS = 6-10 ]		
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 348

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46714

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 4-5 ]			
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	Follicular Cel	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-14 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 349

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 709

HISTO: 46715

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 3-14 ]			
* Eye	Bilateral, Retina	Atrophy	Mild
* Kidney	Papilla	Mineralization	Mild
	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-15 ]			
Mesentery		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Skin		Ulcer	Marked
[ Ulcer TGLS = 3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:30

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 349

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 709

**DOSE:** 250 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46715

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Spleen

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

- Skin Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 350

TRT#: 4

DOSE: 250 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46716

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-6 ]		
* Lung		Histiocytic Sarcoma	
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,2-14+15 ]		
* Nose	Globet Cell	Hyperplasia	Minimal
		Leukemia Mononuclear	
* Ovary		Granulosa Cell Tumor Benign	
	[ Granulosa Cell Tumor Benign TGLS = 6-9 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Spleen		Histiocytic Sarcoma	
		Leukemia Mononuclear	
	[ Histiocytic Sarcoma TGLS = 4-17 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 501

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 673

HISTO: 46567

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Brain		Hemorrhage	Marked
		Thrombosis	Marked
[ Hemorrhage TGLS = 5-1 ]			
[ Thrombosis TGLS = 5-1 ]			
* Eye	Retina	Atrophy	Mild
* Kidney		Infarct	Multiple, Mild
		Leukemia Mononuclear	
	Pelvis, Transit Epithe	Mineralization	Minimal
[ Infarct TGLS = 4-7 ]			
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 501	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 673
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46567

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Brain Hemorrhage;Brain Thrombosis;Kidney Infarct

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 502

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 715

HISTO: 46568

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
* Clitoral Gland		Cyst	Marked
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Mammary Gland		Carcinoma	
		Fibroadenoma	
		[ Carcinoma TGLS = 1-15 ]	
		[ Fibroadenoma TGLS = 2-16+17 ]	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Marked
		[ Cyst TGLS = 4-9 ]	
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 3-10 ]	
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular		Ulcer	Marked
		[ Ulcer TGLS = 5-14 ]	

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma  
 CONTRIBUTORY CAUSE OF DEATH - Stomach;Glandular Ulcer

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 502

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 715

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46568

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 503

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 704

HISTO: 46569

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Moderate
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Marked
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Stomach, Forestomach		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 504

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46570

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose	Respirat Epith	Degeneration	Hyaline, Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Chronic, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 505

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46571

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
* Liver		Basophilic Focus	
* Lung		Hemorrhage	Minimal
	Alveolar Epith	Hyperplasia	Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Nasolacrim Dct	Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 506

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 612  
**HISTO:** 46572

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone Marrow	* Brain	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Uterus	

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Osteosarcoma	Metastatic (Bone)
		Vacuolization Cytoplasmic	Minimal
* Bone	Vertebra	Osteosarcoma	
[ Osteosarcoma TGLS = 5-14+15+16 ]			
* Heart		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 4-6 ]			
* Kidney	Renal Tubule	Cyst	
	Papilla	Mineralization	Minimal
		Nephropathy	Minimal
[ Cyst TGLS = 7-18 ]			
* Lung		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 3-4+5 ]			
* Ovary		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 2-9 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Ulcer	Marked
[ Ulcer TGLS = 6-10 ]			
* Urinary Bladder	Transit Epithe	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Bone Vertebra Osteosarcoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 506

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 612  
**HISTO:** 46572

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH - Lung Osteosarcoma Bone;Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 507

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 1-15 ]		Hyperplasia	Marked
* Intestine Large, Colon [ Leiomyosarcoma TGLS = 5-17+18 ]		Leiomyosarcoma	
* Kidney		Nephropathy	Minimal
* Liver [ Mixed Cell Focus TGLS = 9-20 ]		Basophilic Focus Leukemia Mononuclear Mixed Cell Focus	
* Lymph Node, Mediastinal [ Hyperplasia TGLS = 7-3 ]		Hyperplasia	Lymphoid, Marked
* Lymph Node, Mesenteric [ Ectasia TGLS = 6-19 ]		Ectasia Leukemia Mononuclear	Marked
* Mammary Gland [ Fibroadenoma TGLS = 3-16 ]		Fibroadenoma	
* Nose		Foreign Body	
* Pituitary Gland [ Adenoma TGLS = 4-10 ]	Olfactory Epi	Hyperplasia Adenoma	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 507	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46573

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pleura [ Inflammation TGLS = 8-5 ]		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Zymbal's Gland [ Carcinoma TGLS = 2-14 ]		Carcinoma	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 508

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 509

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 660  
**HISTO:** 46575

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Marked
	[ Cataract TGLS = 1-13 ]		
* Heart	Atrium	Thrombosis	Marked
* Kidney	Pelvis, Transit Epithe	Leukemia Mononuclear	
		Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-14 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hemorrhage	Moderate
	[ Hemorrhage TGLS = 2-10 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-15 ]		
* Thyroid Gland	Follicular Cel	Hyperplasia	Marked
* Uterus		Hemorrhage	Marked
	[ Hemorrhage TGLS = 3-10 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 509

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:** 660  
**HISTO:** 46575

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 510

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 516

HISTO: 46576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone [ Fracture TGLS = 2-14+12 ]	Maxilla	Fracture	Marked
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
Lymph Node [ Infiltration Cellular TGLS = 3-6 ]	Pancreatic	Infiltration Cellular	Histiocyte, Marked
	Pancreatic	Pigmentation	Moderate
* Lymph Node, Mediastinal [ Angiectasis TGLS = 1-3 ]		Angiectasis	Marked
* Nose	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Pleura		Inflammation	Chronic, Minimal
* Skin [ Keratoacanthoma TGLS = 2-14 ]		Keratoacanthoma	

PRIMARY CAUSE OF DEATH

- Bone Maxilla Fracture

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 511

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 4-9 ]		Hyperplasia	Mild
* Kidney	Pelvis, Transit Epithe	Hyperplasia Nephropathy	Minimal Mild
* Liver		Basophilic Focus	
* Lung [ Hemorrhage TGLS = 1-4+5 ]		Hemorrhage Inflammation	Moderate Chronic, Mild
Mesentery [ Necrosis TGLS = 2-14 ]		Necrosis	Moderate
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland [ Cyst TGLS = 3-10 ]		Cyst	Mild
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 512

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Heart		Cardiomyopathy	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 513

TRT#: 6

SEX: Female

DAY ON TEST: 530

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46579

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Peripheral Nerve
* Salivary Glands	* Skin	Spinal Cord	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lymph Node, Mediastinal		Hemorrhage	Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-14 ]			
Oral Mucosa	Pharyngeal	Squamous Cell Carcinoma	
[ Squamous Cell Carcinoma TGLS = 4-17 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-10 ]			
* Stomach, Forestomach		Erosion	Moderate
	Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
[ Erosion TGLS = 7-14 ]			

PRIMARY CAUSE OF DEATH - Oral Mucosa Pharyngeal Squamous Cell Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 514

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 625  
**HISTO:** 46580

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Liver		Leukemia Mononuclear Vacuolization Cytoplasmic	Moderate
[ Leukemia Mononuclear TGLS = 8-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-3 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,6-15+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 9-17 ]			
* Nose	Goblet Cell	Hyperplasia	Marked
		Inflammation	Chronic Active, Marked
	Turbinates	Necrosis	Marked
* Ovary		Cyst	Marked
[ Cyst TGLS = 5-9 ]			
* Spleen		Fibrosis	Marked
[ Fibrosis TGLS = 4-14 ]		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 514

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 625

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46580

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 515

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46581

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Hemorrhage	Moderate
* Kidney		Nephropathy	Moderate
* Larynx		Foreign Body	Marked
		Inflammation	Suppurative, Mild
* Liver		Basophilic Focus	
* Nose		Inflammation	Chronic, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 516

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 611

HISTO: 46582

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Clitoral Gland		Cyst	Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Minimal
* Nose		Inflammation	Chronic, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 517

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46583

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Moderate
* Clitoral Gland		Hyperplasia	Marked
		Inflammation	Chronic, Marked
[ Hyperplasia TGLS = 1-14 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Angiectasis	Minimal
		Basophilic Focus	
		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 518

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 645

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46584

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian 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, Glandular	* Thymus
* Thyroid Gland	* Trachea		

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Kidney	Papilla Pelvis, Transit Epithe	Mineralization Mineralization Inflammation Hepatodiaphragmatic Nodule Leukemia Mononuclear	Minimal Minimal Chronic, Minimal Marked
[ Hepatodiaphragmatic Nodule TGLS = 6-6 ] [ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Pancreatic	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	
Lymph Node			
* Lymph Node, Bronchial			
* Lymph Node, Mediastinal			
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 8-17 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 518	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 645
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46584

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Urinary Bladder	Transit Epithe	Hyperplasia	Moderate
* Uterus		Polyp Stromal	
PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear	

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 519

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 530

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46585

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Lymph Node, Mandibular

**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Nose	Olfactory Epi	Hyperplasia	Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 520

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46586

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 4-17 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,5-15+16+18 ]			
* Nose	Respirat Epith	Degeneration	Hyaline, Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Minimal
* Pituitary Gland		Hyperplasia	Mild
* Skin	Subcut Tiss	Hemangiopericytoma	
[ Hemangiopericytoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 521

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46587

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Islets, Pancreatic [ Carcinoma TGLS = 2-15 ]		Carcinoma	
* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Clear Cell Focus Leukemia Mononuclear	Minimal Mild
* Liver  [ Clear Cell Focus TGLS = 4-16 ]			
* Lung	Alveolus	Infiltration Cellular Inflammation Fibroadenoma	Histiocyte, Minimal Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia Leukemia Mononuclear	Basal Cell, Minimal
* Spleen			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 522

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 689

HISTO: 46588

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Marked
[ Vacuolization Cytoplasmic TGLS = 5-7 ]			
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-8 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[ Fibrosis TGLS = 2-14 ]			
[ Leukemia Mononuclear TGLS = 3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:30

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 522

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 689

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46588

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Stomach, Forestomach

Epithelium

Hyperplasia

Mild

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 523

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46589

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* 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
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 524

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46590

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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	* Spleen	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Hyperplasia Nephropathy	Mild Moderate
[ Nephropathy TGLS = 4-7 ]			
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 525

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46591

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                  |                                       |                           |                     |
|------------------|---------------------------------------|---------------------------|---------------------|
| * Adrenal Cortex |                                       | Vacuolization Cytoplasmic | Marked              |
| * Eye            | Retina                                | Atrophy                   | Mild                |
| * Kidney         | Papilla                               | Mineralization            | Minimal             |
|                  | Pelvis, Transit Epithe                | Mineralization            | Minimal             |
|                  |                                       | Nephropathy               | Moderate            |
| * Liver          |                                       | Basophilic Focus          |                     |
| * Lung           | Alveolus                              | Infiltration Cellular     | Histiocyte, Minimal |
|                  | [ Infiltration Cellular TGLS = 2-16 ] |                           |                     |
| * Mammary Gland  |                                       | Fibroadenoma              |                     |
|                  | [ Fibroadenoma TGLS = 1-14+15 ]       |                           |                     |
| Pleura           |                                       | Inflammation              | Chronic, Minimal    |
|                  | [ Inflammation TGLS = 3-5 ]           |                           |                     |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05  
 Test Type: CHRONIC  
 Route: RESPIRATORY EXPOSURE WHOLE BODY  
 Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 Test Compound: Cumene  
 CAS Number: 98-82-8

Date Report Requested: 10/20/2014  
 Time Report Requested: 15:44:30  
 First Dose M/F: NA / NA  
 Lab: BNW

ANIMAL ID: 526

TRT#: 6

SEX: Female

DAY ON TEST: 624

DOSE: 500 PPM

DISP: Moribund Sacrifice

HISTO: 46592

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney		Leukemia Mononuclear	
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Squamous Cell Carcinoma	Metastatic (Skin)
[ Hyperplasia TGLS = 4-5 ]			
[ Squamous Cell Carcinoma TGLS = 2,3-5+14 ]			
Lymph Node	Deep Cervical	Squamous Cell Carcinoma	Metastatic (Skin)
[ Squamous Cell Carcinoma TGLS = 5-15 ]			
* Lymph Node, Mediastinal		Squamous Cell Carcinoma	Metastatic (Skin)
[ Squamous Cell Carcinoma TGLS = 1-3 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 6-16 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 8-10 ]			
* Skin		Squamous Cell Carcinoma	
[ Squamous Cell Carcinoma TGLS = 7-17 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:30

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 526

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 624

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46592

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Spleen

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

- Skin Squamous Cell Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 527

TRT#: 6

SEX: Female

DAY ON TEST: 730

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46593

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Brain		Compression	Marked
* Harderian Gland		Inflammation	Chronic, Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-15 ]			
Mesentery		Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Olfactory Epi	Necrosis	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 4-16 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Hemorrhage	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 527

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 730  
**HISTO:** 46593

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pigmentation

Moderate

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 528

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46594

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 1-9+19 ]		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe Pelvis, Transit Epithe	Hyperplasia Mineralization Nephropathy	Minimal Minimal Minimal
* Liver		Basophilic Focus Leukemia Mononuclear	
* Lung [ Inflammation TGLS = 7-5 ]	Alveolus	Infiltration Cellular Inflammation	Histiocyte, Mild Chronic, Mild
* Mammary Gland [ Fibroadenoma TGLS = 2,3-14+15+16+17 ]		Fibroadenoma	Multiple
* Nose	Respirat Epith	Hyperplasia	Marked
* Pituitary Gland [ Adenoma TGLS = 4-10 ]		Adenoma	
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus [ Polyp Stromal TGLS = 5-18 ]		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 528

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46594

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 529

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46595

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* 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, Bronchial	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Larynx		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,2-14+15+16 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 4-10 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 530

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 676  
**HISTO:** 46596

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14+15 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-16 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Moderate
		Leukemia Mononuclear	

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 531

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 339

HISTO: 46597

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart	Pericardium	Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
	Atrium	Thrombosis	Marked
	[ Alveolar/Bronchiolar Carcinoma TGLS = 2-16 ]		
* Kidney	Renal Tubule	Accumulation, Hyaline Droplet	Marked
	Note: NO CORRELATING LESION FOR TGL 3.		
* Lung	Alveolar Epith	Alveolar/Bronchiolar Carcinoma	Moderate
		Hyperplasia	Marked
		Thrombosis	Marked
* Lymph Node, Mediastinal		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
Pleura		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1-14+15+16+17 ]		
Skeletal Muscle		Alveolar/Bronchiolar Carcinoma	Metastatic (Lung)
	[ Alveolar/Bronchiolar Carcinoma TGLS = 1-14+15 ]		
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Lung Alveolar/Bronchiolar Carcinoma  
 CONTRIBUTORY CAUSE OF DEATH - Pleura Alveolar/Bronchiolar Carcinoma Lung

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 532

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 732  
**HISTO:** 46598

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Kidney		Leukemia Mononuclear	
	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-6 ]		
* Lung		Inflammation	Chronic, Moderate
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-4 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-14 ]		
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 6-10 ]		
Pleura		Inflammation	Chronic, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 532

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 732  
**HISTO:** 46598

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 7-5 ]	
* Spleen	Leukemia Mononuclear
[ Leukemia Mononuclear TGLS = 3-15 ]	
* Uterus	Polyp Stromal
[ Polyp Stromal TGLS = 4-10 ]	

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 533

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 579

HISTO: 46599

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Islets, Pancreatic	* Kidney	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Liver		Basophilic Focus	
		Vacuolization Cytoplasmic	Moderate
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 3,4-14+17 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hemorrhage	Marked
[ Hemorrhage TGLS = 1-10 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked
* Uterus		Hemorrhage	Marked
		Sarcoma Stromal	
[ Sarcoma Stromal TGLS = 2-15+16 ]			

PRIMARY CAUSE OF DEATH

- Uterus Sarcoma Stromal

CONTRIBUTORY CAUSE OF DEATH

- Uterus Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 534

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 661

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46600

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 2,3--18 ]			
* Eye	Bilateral, Retina	Atrophy	Moderate
	Lens	Cataract	Marked
[ Atrophy TGLS = 1-13 ]			
[ Cataract TGLS = 1-13 ]			
* Kidney	Pelvis, Transit Epithe	Leukemia Mononuclear	
		Mineralization	Minimal
* Liver		Leukemia Mononuclear	
		Vacuolization Cytoplasmic	Mild
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Carcinoma	Metastatic (Ovary)
[ Carcinoma TGLS = 5-4+5 ]			
* Lymph Node, Mediastinal		Hyperplasia	Histiocytic, Marked
* Lymph Node, Mesenteric		Carcinoma	Metastatic (Ovary)
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 10-20 ]			
* Ovary		Cystadenocarcinoma	
[ Cystadenocarcinoma TGLS = 7-15+16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:30

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 534

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 661

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46600

**ORGAN AND ACCOUNTABLE SITE STATUS**

Peritoneum [ Carcinoma TGLS = 8-17 ]		Carcinoma	Metastatic (Ovary)
Pleura [ Carcinoma TGLS = 6-14 ]		Carcinoma	Metastatic (Ovary)
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Submucosa	Fibrosis	Moderate
	Epithelium	Hyperplasia	Marked
		Ulcer	Minimal
[ Hyperplasia TGLS = 9-19 ]			

**PRIMARY CAUSE OF DEATH** - Ovary Cystadenocarcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 535

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46601

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-15+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-17 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 536

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46602

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Eye	Retina	Atrophy	Mild
* Kidney		Nephropathy	Mild
* Liver		Angiectasis	Marked
		Basophilic Focus	
		Clear Cell Focus	
[ Angiectasis TGLS = 3-17 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,4-15+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-14 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 7-5 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 2-3 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 536

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46602

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 537

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46603

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
		Vacuolization Cytoplasmic	Marked
* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Moderate
	[ Cataract TGLS = 1-13 ]		
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
	[ Clear Cell Focus TGLS = 3-6 ]	Clear Cell Focus	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 4-14 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Mild
	[ Cyst TGLS = 2-9 ]		
* Pituitary Gland		Hyperplasia	Mild
* Stomach, Forestomach	Epithelium	Cyst	Marked
	[ Cyst TGLS = 5-10 ]		
* Thyroid Gland	C Cell	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 537

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46603

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 538

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 46604

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Brain		Compression	Marked
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 2-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
	Epithelium	Hyperplasia	Marked
[ Fibroadenoma TGLS = 1-7 ]			
[ Hyperplasia TGLS = 5-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Mild
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
		Ulcer	Mild
* Trachea	Glands	Cyst	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 538

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 722

**DOSE:** 500 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46604

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 539

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46605

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Moderate
	[ Cataract TGLS = 1-13 ]		
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
* Nose	Respirat Epith	Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 540

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 528

HISTO: 46606

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex	Hyperplasia	Minimal
* Liver	Basophilic Focus	
	Necrosis	Moderate
[ Necrosis TGLS = 4-6 ]		
Mesentery	Necrosis	Moderate
[ Necrosis TGLS = 5-15 ]		
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 3-10 ]		
* Spleen	Hematopoietic Cell Proliferation	Marked
* Uterus	Hemorrhage	Marked
	Polyp Stromal	
[ Hemorrhage TGLS = 6-14 ]		
[ Polyp Stromal TGLS = 6-14 ]		

PRIMARY CAUSE OF DEATH

- Uterus Hemorrhage

CONTRIBUTORY CAUSE OF DEATH

- Uterus Polyp Stromal

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 541

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46607

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Fibroadenoma	Minimal Mild
* Liver			
* Mammary Gland			
[ Fibroadenoma TGLS = 1-14 ]			
* Pituitary Gland		Adenoma	
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 542

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46608

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
			[ Basophilic Focus TGLS = 5-6 ]
			[ Hepatodiaphragmatic Nodule TGLS = 4-7 ]
* Mammary Gland		Fibroadenoma	
			[ Fibroadenoma TGLS = 2-9 ]
Mesentery		Necrosis	Moderate
			[ Necrosis TGLS = 3-14 ]
* Nose	Respirat Epith	Adenoma	
* Pituitary Gland		Adenoma	
			[ Adenoma TGLS = 1-10 ]
* Thymus		Hyperplasia	Tubular, Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 543

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46609

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Compression	Marked
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Mammary Gland		Carcinoma	Multiple
		Fibroadenoma	
[ Carcinoma TGLS = 1,3-14+15 ]			
[ Fibroadenoma TGLS = 2-16 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Thyroid Gland	Follicular Cel	Carcinoma	
[ Carcinoma TGLS = 5-3 ]			
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 4-15 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 544

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46610

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Granular Cell Tumor Benign	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
	[ Basophilic Focus TGLS = 3,4,5-6 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-14 ]		
* Nose	Respirat Epith	Degeneration	Hyaline, Minimal
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Uterus		Polyp Stromal	
	[ Polyp Stromal TGLS = 2-10 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 545

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46611

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 546

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 500 PPM

DISP: Terminal Sacrifice

HISTO: 46612

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 5-7 ]			
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Mixed Cell Focus	
[ Mixed Cell Focus TGLS = 4-14 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Nose	Respirat Epith	Hyperplasia	Marked
* Ovary		Cyst	Multiple, Marked
[ Cyst TGLS = 2-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 6-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 546

**TRT#:** 6  
**DOSE:** 500 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 731  
**HISTO:** 46612

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 547

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46613

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Mild
* Clitoral Gland		Hyperplasia	Mild
* Eye	Retina	Atrophy	Mild
	Lens	Cataract	Minimal
	[ Cataract TGLS = 1-13 ]		
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 2,3-14+15 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Marked
	[ Hyperplasia TGLS = 4-10 ]		
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 548

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46614

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Leukemia Mononuclear	Mild Mild
* Liver [ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung [ Leukemia Mononuclear TGLS = 1-4+5 ]	Alveolus	Infiltration Cellular Leukemia Mononuclear	Histiocyte, Marked
* Lymph Node * Lymph Node, Mediastinal	Pancreatic	Leukemia Mononuclear Carcinoma Leukemia Mononuclear Fibroadenoma	Metastatic (Thyroid Gland)
* Mammary Gland [ Fibroadenoma TGLS = 5-15 ]			
Mesentery [ Necrosis TGLS = 6-15 ]		Necrosis	Moderate
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland		Adenoma Cyst	Mild
* Spleen		Fibrosis Leukemia Mononuclear	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 548	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 500 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46614

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Fibrosis TGLS = 3-14 ]			
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Stomach, Forestomach		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Carcinoma	
[ Carcinoma TGLS = 7-3 ]			
Tongue	Epithelium	Hyperplasia	Mild
[ Hyperplasia TGLS = 8-14 ]			

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 549

TRT#: 6

DOSE: 500 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46615

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Eye	Retina	Atrophy	Mild
* Kidney		Leukemia Mononuclear	
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-14 ]		
* Nose		Foreign Body	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
* Skin		Keratoacanthoma	
	[ Keratoacanthoma TGLS = 2-15 ]		
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 549

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46615

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 550

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46616

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Mammary Gland		Fibroadenoma	
		[ Fibroadenoma TGLS = 1-14 ]	
* Pituitary Gland		Hyperplasia	Moderate
* Skin		Basal Cell Carcinoma	
		[ Basal Cell Carcinoma TGLS = 2-15 ]	
* Uterus		Polyp Stromal	
		[ Polyp Stromal TGLS = 3-10 ]	

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 701

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla           | * Bone                   | * Bone Marrow              | * Brain                   |
| * Clitoral Gland            | * Esophagus              | * Eye                      | * Harderian Gland         |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Lymph Node, Bronchial  | * Lymph Node, Mesenteric   | * Ovary                   |
| * Pancreas                  | * Parathyroid Gland      | * Salivary Glands          | * Skin                    |
| * Spleen                    | * Stomach, Forestomach   | * Stomach, Glandular       | * Thymus                  |
| * Trachea                   | * Urinary Bladder        | * Uterus                   |                           |

MISSING

- |                          |                           |
|--------------------------|---------------------------|
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
|--------------------------|---------------------------|

OBSERVATIONS

- |                   |   |                              |                     |
|-------------------|---|------------------------------|---------------------|
| * Adrenal Cortex  |   | Hyperplasia                  | Mild                |
| * Kidney          |   | Nephropathy                  | Mild                |
| * Liver           |   | Basophilic Focus             |                     |
|                   |   | Clear Cell Focus             |                     |
| * Lung            |   | Alveolar/Bronchiolar Adenoma |                     |
|                   | Alveolus                                    | Infiltration Cellular        | Histiocyte, Minimal |
|                   | [ Alveolar/Bronchiolar Adenoma TGLS = 1-5 ] |                              |                     |
| * Mammary Gland   |   | Fibroadenoma                 |                     |
|                   | [ Fibroadenoma TGLS = 2-14 ]                |                              |                     |
| * Nose            | Olfactory Epi                               | Hyperplasia                  | Basal Cell, Minimal |
| * Pituitary Gland |   | Hyperplasia                  | Mild                |
| Pleura            |   | Inflammation                 | Chronic, Minimal    |
| * Thyroid Gland   | C Cell                                      | Hyperplasia                  | Marked              |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 702

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46468

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15+16+17 ]			
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Chronic, Mild
* Ovary		Cyst	Mild
[ Cyst TGLS = 4-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Marked
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 5-18 ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 703

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Bronchiole	Inflammation	Chronic, Mild
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Mild
	Olfactory Epi	Metaplasia	Mild
* Ovary		Cyst	Mild
[ Cyst TGLS = 2-9 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 704

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 618

HISTO: 46470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
		Vacuolization Cytoplasmic	Marked
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 2-17 ]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 3-14+15 ]		
* Pituitary Gland		Hyperplasia	Moderate
	[ Hyperplasia TGLS = 1-10 ]		
Pleura		Inflammation	Chronic, Mild
* Skin		Hyperkeratosis	Mild
	[ Hyperkeratosis TGLS = 5-16 ]		
* Spleen		Leukemia Mononuclear	
* Thymus		Thymoma Benign	
* Uterus		Hemorrhage	Marked
	[ Hemorrhage TGLS = 4-10 ]		

PRIMARY CAUSE OF DEATH - Mammary Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 705

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Islets, Pancreatic		Adenoma	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-7 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
	Respirat Epith	Hyperplasia	Mild
* Pituitary Gland		Hyperplasia	Moderate
[ Hyperplasia TGLS = 5-10 ]			
* Spleen		Leukemia Mononuclear	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 706

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Brain		Astrocytoma Malignant	
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
* Thyroid Gland	Follicular Cel	Adenoma	
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 707

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Galactocele	Minimal
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Mild
[ Cyst TGLS = 1-9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 708

TRT#: 8

SEX: Female

DAY ON TEST: 683

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Moderate
* Eye	Cornea	Inflammation	Minimal
* Kidney		Nephropathy	Marked
[ Nephropathy TGLS = 7-7 ]			
* Liver		Basophilic Focus	
		Cholangiocarcinoma	
		Hepatodiaphragmatic Nodule	Marked
[ Cholangiocarcinoma TGLS = 5-16 ]			
[ Hepatodiaphragmatic Nodule TGLS = 6-17 ]			
* Lymph Node, Bronchial		Hyperplasia	Lymphoid, Moderate
[ Hyperplasia TGLS = 3-4 ]			
* Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Carcinoma TGLS = 2-15 ]			
[ Fibroadenoma TGLS = 2-15 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Skin		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 708

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 683

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46474

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 709

TRT#: 8

SEX: Female

DAY ON TEST: 730

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Adenoma	
* Intestine Large, Rectum		Adenoma	
* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-15 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Thyroid Gland	Follicular Cel	Adenoma	
* Uterus	Endometrium	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 710

TRT#: 8

SEX: Female

DAY ON TEST: 607

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46476

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Cortex	Vacuolization Cytoplasmic	Moderate
* Liver	Basophilic Focus	
	Vacuolization Cytoplasmic	Moderate
[ Vacuolization Cytoplasmic TGLS = 3-6 ]		
* Lymph Node, Mandibular	Carcinoma	Metastatic (Zymbal'S Gland)
	Hyperplasia	Lymphoid, Marked
* Lymph Node, Mediastinal	Hyperplasia	Lymphoid, Marked
* Pituitary Gland	Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-10 ]		
* Spleen	Hematopoietic Cell Proliferation	Marked
Zymbal's Gland	Carcinoma	
[ Carcinoma TGLS = 1-14+15 ]		

PRIMARY CAUSE OF DEATH

- Zymbal's Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 711

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46477

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Pituitary Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 712

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46478

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Ovary	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Clitoral Gland		Hyperplasia	Marked
		Inflammation	Chronic, Marked
[ Hyperplasia TGLS = 1-14 ]			
* Intestine Large, Colon	Artery	Inflammation	Chronic, Moderate
* Kidney	Artery	Inflammation	Chronic Active, Mild
	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3,5-7+15 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
	Bronchiole	Hyperplasia	Mild
		Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 6-16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas	Artery	Inflammation	Chronic, Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene

**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014

**Time Report Requested:** 15:44:30

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 712

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46478

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Pituitary Gland

[ Adenoma TGLS = 2-10 ]

Adenoma

Pleura

[ Inflammation TGLS = 4-5 ]

Inflammation

Chronic, Moderate

\* Thyroid Gland

C Cell

Hyperplasia

Marked

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 713

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46479

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Moderate
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Moderate
* Mammary Gland		Carcinoma	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 1-10 ]		
Pleura		Inflammation	Chronic, Moderate
	[ Inflammation TGLS = 2,3-4+5 ]		
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 713

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46479

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 714

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 732

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46480

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Cyst	Squamous
	Alveolar Epith	Metaplasia	Squamous, Marked
[ Cyst TGLS = 5-4 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]			
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 8-10 ]			
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked
[ Leukemia Mononuclear TGLS = 3-14 ]			
[ Necrosis TGLS = 4-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 714	<b>TRT#:</b> 8	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 46480

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 715

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46481

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 716

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 46482

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus	Mild Minimal
* Liver		Inflammation	Chronic, Minimal
* Lung		Carcinoma	Metastatic (Thyroid Gland)
* Lymph Node, Mediastinal [ Carcinoma TGLS = 2-3 ]			
* Mammary Gland [ Fibroadenoma TGLS = 3,4,5-14+15+16 ]		Fibroadenoma	Multiple
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
		Hyperplasia	Mild
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland [ Carcinoma TGLS = 1-3 ]	C Cell	Carcinoma	
Tongue [ Hyperplasia TGLS = 6-17 ]	Epithelium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 717

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46483

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Eye	Retina	Atrophy	Minimal
	Lens	Cataract	Minimal
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-7 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 718

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 674

HISTO: 46484

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Brain		Carcinoma	Metastatic (Pituitary Gland)
		Compression	Marked
		Hemorrhage	Marked
[ Carcinoma TGLS = 3-1 ]			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lymph Node, Mediastinal		Hemorrhage	Marked
[ Hemorrhage TGLS = 7-3 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Moderate
[ Cyst TGLS = 4-9 ]			
* Pituitary Gland		Carcinoma	
[ Carcinoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 718

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 674

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46484

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Carcinoma Pituitary Gland;Brain Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 719

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46485

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 720

TRT#: 8

SEX: Female

DAY ON TEST: 628

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46486

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* 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, Bronchial	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Larynx		Inflammation	Suppurative, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Urinary Bladder	Transit Epithe	Hyperplasia	Mild
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 721

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46487

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney [ Nephropathy TGLS = 4-7 ]		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lymph Node, Mediastinal		Carcinoma	Metastatic (Thyroid Gland)
* Mammary Gland [ Fibroadenoma TGLS = 1-7 ]		Fibroadenoma	
* Nose	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
		Inflammation	Suppurative, Mild
* Pituitary Gland [ Adenoma TGLS = 3-10 ]		Adenoma	
* Thyroid Gland [ Carcinoma TGLS = 2-3 ]	C Cell	Carcinoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 722

TRT#: 8

SEX: Female

DAY ON TEST: 267

DOSE: 1000 PPM

DISP: Natural Death

HISTO: 46488

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex

\* Brain

\* Harderian Gland

\* Intestine Large, Rectum

\* Islets, Pancreatic

\* Lymph Node, Mesenteric

\* Parathyroid Gland

\* Spleen

\* Trachea

\* Adrenal Medulla

\* Clitoral Gland

\* Heart

\* Intestine Small, Duodenum

\* Kidney

\* Mammary Gland

\* Pituitary Gland

\* Stomach, Glandular

\* Urinary Bladder

\* Bone

\* Esophagus

\* Intestine Large, Cecum

\* Intestine Small, Ileum

\* Larynx

\* Ovary

\* Salivary Glands

\* Thymus

\* Uterus

\* Bone Marrow

\* Eye

\* Intestine Large, Colon

\* Intestine Small, Jejunum

\* Liver

\* Pancreas

\* Skin

\* Thyroid Gland

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

\* Lymph Node, Mediastinal

OBSERVATIONS

\* Lung

Alveolus

Infiltration Cellular

Histiocyte, Minimal

\* Nose

Nasopharyn Dct

Carcinoma

Metastatic (Oral Mucosa)

Note: carcinoma of gingiva or Fordyce granules invades nasal cavity and compressed nasopharyngeal duct -slide 12.

Oral Mucosa

Squamous Cell Carcinoma

\* Stomach, Forestomach

Inflammation

Suppurative, Marked

Ulcer

Marked

PRIMARY CAUSE OF DEATH

- Oral Mucosa Squamous Cell Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 723

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46489

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 724

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46490

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus Leukemia Mononuclear	Minimal Mild
* Liver			
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+16 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Pituitary Gland		Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
* Stomach, Glandular	Epithelium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 725

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46491

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Hyperplasia	Marked
		Inflammation	Chronic, Marked
[ Hyperplasia TGLS = 1-14 ]			
* Kidney		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Clear Cell Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Mild
[ Inflammation TGLS = 2-5 ]			
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Mild
Pleura		Inflammation	Chronic, Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 726

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46492

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Inflammation	Chronic, Moderate
* Eye	Retina	Atrophy	Moderate
	Lens	Cataract	Marked
	[ Cataract TGLS = 1-13 ]		
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Moderate
	[ Hyperplasia TGLS = 2-10 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 727

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex	Hyperplasia	Mild
* Kidney	Nephropathy	Mild
* Nose	Foreign Body	
* Pituitary Gland	Adenoma	
[ Adenoma TGLS = 2-10 ]		
* Skin	Inflammation	Chronic, Moderate
[ Ulcer TGLS = 1-14 ]	Ulcer	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 728

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 619

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46494

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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**OBSERVATIONS**

* Adrenal Cortex		Hyperplasia	Minimal
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14+9 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 729

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46495

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-14+15 ]			
* Heart		Inflammation	Chronic, Mild
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
	Respirat Epith	Hyperplasia	Marked
		Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 730

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 542

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46496

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Brain	Medulla, Neuron	Compression Necrosis	Marked Moderate
Note: neuronal necrosis in medulla is very likely related to compression from pituitary tumor.			
* Kidney		Nephropathy	Minimal
* Liver		Basophilic Focus Hepatodiaphragmatic Nodule Leukemia Mononuclear	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 3-14 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Moderate
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH	- Pituitary Gland Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Brain Compression

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 731

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46497

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Harderian Gland		Inflammation	Chronic, Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Moderate
* Liver		Basophilic Focus	
		Eosinophilic Focus	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Foreign Body	
	Goblet Cell	Hyperplasia	Mild
	Olfactory Epi	Hyperplasia	Basal Cell, Mild
		Inflammation	Suppurative, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 732

TRT#: 8

SEX: Female

DAY ON TEST: 695

DOSE: 1000 PPM

DISP: Natural Death

HISTO: 46498

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex  
\* Brain  
\* Harderian Gland  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Stomach, Forestomach  
\* Trachea

\* Adrenal Medulla  
\* Clitoral Gland  
\* Heart  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Colon  
\* Larynx  
\* Nose  
\* Salivary Glands  
\* Thymus  
\* Uterus

\* Bone Marrow  
\* Eye  
\* Intestine Large, Rectum  
\* Lung  
\* Ovary  
\* Skin  
\* Thyroid Gland

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

\* Lymph Node, Mediastinal

AUTO PRECLUDES DIAG.

\* Intestine Large, Cecum

\* Intestine Small, Duodenum

\* Intestine Small, Ileum

\* Intestine Small, Jejunum

INSUFFICIENT TISSUE

\* Pituitary Gland

OBSERVATIONS

\* Liver  
Mesentery  
[ Necrosis TGLS = 1-14 ]  
\* Spleen

Leukemia Mononuclear  
Necrosis  
Leukemia Mononuclear

Moderate

PRIMARY CAUSE OF DEATH

- UNCERTAIN

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 733

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46499

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy	Minimal Mild
* Lung	Alveolar Epith	Hyperplasia Fibroadenoma	Minimal
* Mammary Gland [ Fibroadenoma TGLS = 2-14 ]			
Mesentery [ Necrosis TGLS = 1-7 ]		Necrosis	Moderate
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Uterus	Endometrium	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 734

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46500

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Liver		Basophilic Focus	
		Vacuolization Cytoplasmic	Moderate
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Lymph Node, Mandibular		Ectasia	Marked
[ Ectasia TGLS = 2-9 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 3,4-16+17 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14+15 ]			
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 735

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 688

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46501

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Brain		Compression	Moderate
* Kidney	Renal Tubule	Cyst	
	Papilla	Leukemia Mononuclear	
	Pelvis, Transit Epithe	Mineralization	Minimal
		Mineralization	Minimal
		Nephropathy	Moderate
[ Nephropathy TGLS = 3-7 ]			
* Liver		Basophilic Focus	
		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14+15 ]			
* Nose		Leukemia Mononuclear	
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Minimal

**PRIMARY CAUSE OF DEATH** - Pituitary Gland Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 736

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 704

HISTO: 46502

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy	Minimal Mild
* Liver		Basophilic Focus	
* Lung		Inflammation	Chronic, Mild
[ Inflammation TGLS = 2-5 ]			
* Lymph Node, Bronchial		Hemorrhage	Marked
[ Hemorrhage TGLS = 1-3 ]			
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 5,6-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-7 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
* Skin		Ulcer	Marked
[ Ulcer TGLS = 5-14 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked
* Uterus		Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 736

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 704

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46502

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Mammary Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Adenoma;Skin Ulcer

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 737

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 696

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46503

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Clitoral Gland		Hyperplasia	Moderate
* Kidney		Nephropathy	Minimal
* Liver		Mixed Cell Focus	
		Necrosis	Marked
	[ Mixed Cell Focus TGLS = 6-14 ]		
	[ Necrosis TGLS = 5,6-6+14 ]		
* Lung		Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 2-16 ]		
Mesentery		Rhabdomyosarcoma	
	[ Rhabdomyosarcoma TGLS = 7,8-15+17 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pancreas		Rhabdomyosarcoma	
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 3-10 ]		
Pleura		Inflammation	Chronic, Minimal
Skeletal Muscle		Rhabdomyosarcoma	
	[ Rhabdomyosarcoma TGLS = 7-15 ]		
* Spleen		Rhabdomyosarcoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 737	<b>TRT#:</b> 8	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 696
	<b>DOSE:</b> 1000 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 46503

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Rhabdomyosarcoma TGLS = 4-14 ]

* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
<b>PRIMARY CAUSE OF DEATH</b>	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 738

TRT#: 8

SEX: Female

DAY ON TEST: 411

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46504

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland		Hyperplasia	Mild
Pleura		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Mild
* Uterus		Sarcoma Stromal	

[ Sarcoma Stromal TGLS = 3-14+15+16 ]

PRIMARY CAUSE OF DEATH

- Uterus Sarcoma Stromal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 739

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46505

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney	Pelvis, Transit Epithe	Mineralization Nephropathy Basophilic Focus	Minimal Mild
* Liver		Inflammation	Chronic, Mild
* Lung		Hyperplasia	Basal Cell, Minimal
* Nose	Olfactory Epi Respirat Epith	Hyperplasia Adenoma	Moderate
* Pituitary Gland [ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 740

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46506

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 741

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 659

HISTO: 46507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Brain		Compression	Marked
		Hemorrhage	Marked
* Eye	Lens	Cataract	Minimal
	Cornea, Epithelium	Hyperplasia	Mild
* Kidney		Nephropathy	Mild
* Larynx		Inflammation	Chronic, Minimal
* Mammary Gland		Adenoma	
		Fibroadenoma	
	Epithelium	Hyperplasia	Marked
Note: slide 9 adjacent to clitoral gland [ Fibroadenoma TGLS = 1-14+15 ]			
* Nose	Respirat Epith	Hyperplasia	Mild
	Olfactory Epi	Metaplasia	Mild
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 741

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 659

**DOSE:** 1000 PPM

**DISP:** Natural Death

**HISTO:** 46507

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

PRIMARY CAUSE OF DEATH

- Pituitary Gland Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

**ANIMAL ID:** 742

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 696

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46508

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Adrenal Cortex		Necrosis	Moderate
* Intestine Large, Cecum		Necrosis	Moderate
[ Necrosis TGLS = 9-16 ]			
* Kidney		Nephropathy	Mild
[ Nephropathy TGLS = 6-7 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]		Necrosis	Marked
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]			
* Pituitary Gland		Cyst	Marked
[ Cyst TGLS = 8-10 ]		Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 742

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 696

**DOSE:** 1000 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 46508

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3-14 ]

[ Necrosis TGLS = 4,5-14 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 743

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Eye
* Harderian Gland	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mandibular	* Mammary Gland	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 6-6 ]			
* Kidney		Nephropathy	Minimal
* Liver		Lymphoma Malignant	
		Necrosis	Moderate
[ Lymphoma Malignant TGLS = 7-6 ]			
[ Necrosis TGLS = 7-6 ]			
* Lung	Mediastinum	Lymphoma Malignant	
* Lymph Node, Mediastinal		Lymphoma Malignant	
* Lymph Node, Mesenteric		Lymphoma Malignant	
		Necrosis	Moderate
[ Lymphoma Malignant TGLS = 10-8 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Ovary		Cyst	Marked
[ Cyst TGLS = 4-9 ]			
* Pancreas		Lymphoma Malignant	
		Thrombosis	Marked
[ Thrombosis TGLS = 9-14 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 8-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 743	<b>TRT#:</b> 8 <b>DOSE:</b> 1000 PPM	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46509
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Atrophy TGLS = 5-6 ]	Atrophy	Marked
* Stomach, Forestomach	Squamous Cell Papilloma	
* Thymus [ Lymphoma Malignant TGLS = 2,3-3 ]	Lymphoma Malignant	

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 744

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 PPM

DISP: Terminal Sacrifice

HISTO: 46510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Mineralization	Mild
		Nephropathy	Minimal
* Liver		Basophilic Focus	
* Lung	Alveolar Epith	Hyperplasia	Marked
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
	[ Fibroadenoma TGLS = 1,4-14+15 ]		
* Pituitary Gland		Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Hyperplasia	Moderate
	[ Polyp Stromal TGLS = 3-10 ]	Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 745

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Mild
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 4-7 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2,3-14+15+16 ]			
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 5-10 ]			
Pleura		Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 746

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 731

HISTO: 46512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Esophagus	* Eye	* Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Cyst	Minimal
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Mild
* Lung	Bronchiole	Inflammation	Chronic, Minimal
		Inflammation	Chronic, Mild
* Mammary Gland		Fibroadenoma	Multiple
		Galactocele	Marked
		[ Fibroadenoma TGLS = 3,4,5-16+17+18 ]	
		[ Galactocele TGLS = 2-15 ]	
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Adenoma	
		[ Adenoma TGLS = 7-10 ]	
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibrosis	Mild
		Keratoacanthoma	
		[ Fibrosis TGLS = 6-19 ]	
		[ Keratoacanthoma TGLS = 1-14 ]	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 746

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 731

**DOSE:** 1000 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 46512

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 747

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 400

HISTO: 46513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone Marrow	* Clitoral Gland
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Larynx	* Liver	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone	Maxilla	Inflammation	Chronic Active, Moderate
* Brain	Neuron	Degeneration	Moderate
		Demyelination	Moderate
		Gliosis	Moderate
		Hemorrhage	Minimal
		Inflammation	Chronic Active, Moderate
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal		Hyperplasia	Lymphoid, Moderate
		Inflammation	Suppurative, Mild
* Pituitary Gland		Hyperplasia	Mild
Spinal Cord		Gliosis	Moderate
		Inflammation	Chronic Active, Moderate

PRIMARY CAUSE OF DEATH

- Brain Inflammation

Animal Note: Etiology of CNS lesions is not evident. Morphology suggests a diffuse demyelinating inflammatory process involving brain and cord.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/20/2014

Test Type: CHRONIC

Test Compound: Cumene

Time Report Requested: 15:44:30

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 98-82-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 748

TRT#: 8

SEX: Female

DAY ON TEST: 625

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Pelvis, Transit Epithe	Mineralization	Minimal
		Nephropathy	Minimal
* Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 4-6 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-15 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 3-16 ]		
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal
Tongue	Epithelium	Hyperplasia	Marked
	[ Hyperplasia TGLS = 2-14 ]		

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 749

TRT#: 8

SEX: Female

DAY ON TEST: 638

DOSE: 1000 PPM

DISP: Moribund Sacrifice

HISTO: 46515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 2-9+14 ]		Hyperplasia	Marked
* Kidney		Nephropathy	Mild
* Liver		Basophilic Focus	
* Mammary Gland		Fibroadenoma	
* Nose	Respirat Epith	Adenoma	
	Olfactory Epi	Hyperplasia	Basal Cell, Minimal
* Pituitary Gland		Cyst	Marked
		Hyperplasia	Marked
[ Cyst TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Cyst

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 96011-05

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Cumene

CAS Number: 98-82-8

Date Report Requested: 10/20/2014

Time Report Requested: 15:44:30

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 750

TRT#: 8

DOSE: 1000 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 730

HISTO: 46516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	* Bone	* Bone Marrow	* Brain
* Esophagus	* Eye	* Harderian Gland	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
* Clitoral Gland		Hyperplasia	Marked
[ Hyperplasia TGLS = 2-14 ]			
* Kidney	Pelvis, Transit Epithe	Mineralization	Minimal
[ Nephropathy TGLS = 5-7 ]		Nephropathy	Mild
* Larynx	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
* Lung	Alveolar Epith	Hyperplasia	Mild
	Bronchiole	Inflammation	Chronic, Moderate
		Inflammation	Chronic, Moderate
* Nose	Olfactory Epi	Hyperplasia	Basal Cell, Mild
* Ovary		Cyst	Marked
		Leiomyosarcoma	Metastatic (Uterus)
[ Cyst TGLS = 3-9 ]			
[ Leiomyosarcoma TGLS = 6-16 ]			
* Pituitary Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Moderate
* Stomach, Forestomach	Epithelium	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 96011-05  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Cumene  
**CAS Number:** 98-82-8

**Date Report Requested:** 10/20/2014  
**Time Report Requested:** 15:44:30  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 750	<b>TRT#:</b> 8 <b>DOSE:</b> 1000 PPM	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 730 <b>HISTO:</b> 46516
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus	Endometrium	Hyperplasia Leiomyosarcoma	Mild

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[ Leiomyosarcoma TGLS = 4,6,7,8-15+16+17 ]

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PRIMARY CAUSE OF DEATH

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

\* PROTOCOL REQUIRED TISSUE