

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

F2_HSD Rats

NTP Study Number: C10472B
Lock Date: 08/29/2013
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 3.0.2.3_002
PWG Approval Date: 03/08/2016

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Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62611

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1,2-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 5-19] | | |
| * Nose | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Preputial Gland | | Cyst | Minimal |
| | | Inflammation | Minimal |
| | [Cyst TGLs = 4-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
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First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62611

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Artery

Inflammation

Mild

Atrophy

Marked

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 CAS Number: 98-56-6

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 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 2

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62612

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 1-8] | | |
| * Kidney | | Nephropathy | Mild |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

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 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62613

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|----------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 3-7] | | |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1,2-5+6] | | |
| * Nose | | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Exudate | Minimal |
| * Pancreas | | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | | Inflammation | Minimal |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

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First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 505

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62614

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 |
| * Kidney | * Larynx | * Liver | * Lymph Node, Mandibular |
| * 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 | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|------------------------------------|-------------------------------|---------------------|
| * Brain | | Glioma Malignant | |
| | [Glioma Malignant TGLs = 3-1+18] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Brain Glioma Malignant

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 Lab: BNW

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62615

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Mild |
| | [Adenoma TGLs = 1-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
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 Species/Strain: RATS/HSD

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 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 6

TRT#: 1

SEX: Male

DAY ON TEST: 674

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62616

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|---------------------------|-----------------|----------------------------------|-------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| [Pheochromocytoma Benign | TGLs = 4-8+18] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy | TGLs = 2-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| [Inflammation | TGLs = 3-5+6] | | |
| Mesentery | Fat | Necrosis | Minimal |
| [Necrosis | TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 6

TRT#: 1

SEX: Male

DAY ON TEST: 674

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62616

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

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 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

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 Lab: BNW

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62617

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|------------------------------|----------------------------------|----------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Hemorrhage | Mild |
| | | Nephropathy | Mild |
| | [Hemorrhage TGLs = 3-8] | | |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 4-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

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 Lab: BNW

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 677

DOSE: Control

DISP: Natural Death

HISTO: 62618

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|----------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | | Glioma Malignant | |
| * Epididymis | | Mesothelioma Malignant | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| | Pars Intermed | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

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Lab: BNW

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 677

DOSE: Control

DISP: Natural Death

HISTO: 62618

ORGAN AND ACCOUNTABLE SITE STATUS

Artery

Inflammation

Minimal

Mesothelioma Malignant

Atrophy

Moderate

* Thymus

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

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Date Report Requested: 05/16/2016
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 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 722

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62619

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Larynx | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|----------------------------|----------------------------------|--|---------------|
| * Adrenal Medulla | | Hyperplasia Pheochromocytoma Benign | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Small, Jejunum | | Leiomyosarcoma | |
| | [Leiomyosarcoma TGLs = 7-22] | | |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 8-8+19] | | |
| * Liver | | Clear Cell Focus | |
| | Hepatocyte | Degeneration | Minimal |
| | | Eosinophilic Focus | |
| * Lung | | Bile Duct | |
| | | Hyperplasia | Minimal |
| | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 5,6-5+18] | | |
| Lymph Node | Renal | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 9-23] | | |
| * Lymph Node, Mandibular | | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 1-17] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 722

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62619

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---|-------------------------------|---------|
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Squamous Cell Papilloma | |
| | [Squamous Cell Papilloma TGLs = 4-21] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Ultimobranchial Cyst | |
| Tooth | | Odontoma | |
| | [Odontoma TGLs = 3-20] | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy
CONTRIBUTORY CAUSE OF DEATH - Intestine Small, Jejunum Leiomyosarcoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62620

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|-----------------------------|--------------------------|----------------------------|
| * Bone | * Bone Marrow | * Brain | * Epididymis |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Salivary Glands | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

- | | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

- | | | | |
|---------------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| Blood Vessel | Aorta | Mineralization | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Large, Rectum | Serosa | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Prostate | | Inflammation | Moderate |
| | [Inflammation TGLs = 4-21] | | |
| * Seminal Vesicle | | Inflammation | Mild |
| * Skin | | Cyst | Squamous |
| | | Keratoacanthoma | |
| | [Cyst TGLs = 1-18] | | |
| | [Keratoacanthoma TGLs = 3-19] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62620

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|----------------|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Interstit Cell | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Follicular Cel | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 11

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62621

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|---------------------------|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Degeneration | Cystic, Mild |
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| [Pheochromocytoma Benign | TGLs = 1-8] | | |
| Blood Vessel | Aorta | Mineralization | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 2-10] | | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 11

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62621

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62622

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Inflammation | Mild |
| | Subcut Tiss | Lipoma | |
| | [Inflammation TGLs = 1-16] | | |
| | [Lipoma TGLs = 2-18+19+20] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62622

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62623

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | | | |
|-------------------------|-----------------|---------------------|----------|
| * Lymph Node, Bronchial | * Mammary Gland | * Parathyroid Gland | * Thymus |
|-------------------------|-----------------|---------------------|----------|

OBSERVATIONS

| | | | |
|------------------------------|---------------|----------------------------------|----------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Hepatodiaphragmatic Nodule | |
| | Bile Duct | Hyperplasia | Minimal |
| [Hepatodiaphragmatic Nodule | TGLs = 1-7] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 542

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62624

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Trachea | * Urinary Bladder |

OBSERVATIONS

- | | | | |
|-------------------|-------------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| Blood Vessel | Aorta | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Hyperplasia | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 2-4] | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 672

DOSE: Control

DISP: Natural Death

HISTO: 62625

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|--------------------------------------|-------------------------------|----------------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Eye | Cornea | Inflammation | Mild |
| * Heart | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 5-15] | | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Leukemia Mononuclear | |
| * Lung | | Leukemia Mononuclear | |
| | Lymph Node Axillary | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 8-19] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 3-17] | | |
| * Lymph Node, Mediastinal | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 4-4] | | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 9-21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Marked |
| | Olfactory Epi | Metaplasia | Respiratory, Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 672

DOSE: Control

DISP: Natural Death

HISTO: 62625

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|---|------------------------------------|----------|
| * Spleen | Hemorrhage Leukemia Mononuclear | Moderate |
| [Hemorrhage TGLs = 7-19] [Leukemia Mononuclear TGLs = 6-7] | | |
| * Thymus | Atrophy Leukemia Mononuclear | Marked |
| * Thyroid Gland | Ultimobranchial Cyst | Multiple |
| * Trachea | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 648

DOSE: Control

DISP: Natural Death

HISTO: 62626

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|----------------------|----------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Cyst | |
| | | Nephropathy | Marked |
| | [Cyst TGLs = 1-8] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Cyst | Mild |
| | [Cyst TGLs = 2-16] | | |
| * Testes | Artery | Inflammation | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 17

TRT#: 1

SEX: Male

DAY ON TEST: 588

DOSE: Control

DISP: Natural Death

HISTO: 62627

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------------------------|------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Salivary Glands | Parotid GI | Atrophy | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 18

TRT#: 1

SEX: Male

DAY ON TEST: 568

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62628

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|------------------------|---|----------------------------|-----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| Coagulating Gland | | Inflammation | Mild |
| * Eye | Antr Chamber | Inflammation | Suppurative, Moderate |
| | [Inflammation TGLs = 4-13] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Hepatodiaphragmatic Nodule | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Hepatodiaphragmatic Nodule TGLs = 3-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Skin | Sebaceous GI | Adenoma | |
| | | Inflammation | Moderate |
| | [Adenoma TGLs = 2-19] | | |
| | [Inflammation TGLs = 1-18] | | |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH - Skin Sebaceous GI Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 488

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62629

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * 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 |
| * Pancreas | * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | Skeletal Muscle |
| * Skin | Spinal Cord | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | |

OBSERVATIONS

| | | | |
|---------------------------|---|-----------------------|---------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Leukemia Granulocytic | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Leukemia Granulocytic | |
| | | Nephropathy | Mild |
| | [Leukemia Granulocytic TGLs = 4,5 - 8+19] | | |
| * Larynx | | Leukemia Granulocytic | |
| * Liver | | Leukemia Granulocytic | |
| * Lung | | Leukemia Granulocytic | |
| Lymph Node | Renal | Leukemia Granulocytic | |
| | Pancreatic | Leukemia Granulocytic | |
| | [Leukemia Granulocytic TGLs = 6-19] | | |
| | [Leukemia Granulocytic TGLs = 3-18] | | |
| * Lymph Node, Bronchial | | Leukemia Granulocytic | |
| * Lymph Node, Mandibular | | Leukemia Granulocytic | |
| * Lymph Node, Mediastinal | | Leukemia Granulocytic | |
| * Nose | | Leukemia Granulocytic | |
| * Seminal Vesicle | | Inflammation | Mild |
| | [Inflammation TGLs = 7-10] | | |
| * Spleen | | Leukemia Granulocytic | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 488

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62629

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Granulocytic TGLs = 2-7]

* Thymus

Atrophy

Moderate

* Urinary Bladder

Ulcer

Moderate

[Ulcer TGLs = 1-10]

PRIMARY CAUSE OF DEATH - Spleen Leukemia Granulocytic

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62630

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62631

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | Peripheral Nerve | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| Spinal Cord | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-----------------------------|-------------------|----------------------------------|------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| [Pheochromocytoma Benign | TGLs = 1,2-8+18] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy | TGLs = 5,6-8+19] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolar Epith | Hyperplasia | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion | TGLs = 3-4] | | |
| * Nose | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma | TGLs = 4-10] | | |
| * Skin | | Cyst Epithelial Inclusion | Minimal |
| [Cyst Epithelial Inclusion | TGLs = 7-22] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62631

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 22

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62632

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Larynx |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------------------|---------------|-------------------------------|-------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma TGLs = 7-18] | | | |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 5-8] | | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| Lymph Node | Iliac | Hyperplasia | Mild |
| [Hyperplasia TGLs = 6-16] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 4-10] | | | |
| * Preputial Gland | | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 22

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62632

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------|----------------------------------|----------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| | | Ultimobranchial Cyst | |

[Hyperplasia TGLs = 3-4]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62633

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|----------------------|----------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Cyst | |
| | | Nephropathy | Mild |
| | [Cyst TGLs = 1-16] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 374

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62634

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

| | |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mesenteric |
|-------------------------|--------------------------|

OBSERVATIONS

| | | | |
|------------------------------------|----------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Epididymis | | Sarcoma | |
| [Sarcoma TGLs = 5,6-9+18] | | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Seminal Vesicle | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| [Hematopoietic Cell Proliferation | TGLs = 3-7] | | |
| * Testes | Germinal Epith | Atrophy | Moderate |
| [Atrophy TGLs = 4-9] | | | |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Epididymis Sarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62635

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------|----------------------------------|----------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 1-10] | | |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 26

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62636

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |

OBSERVATIONS

| | | | |
|-------------------|--|--|---|
| * Adrenal Medulla | | Hyperplasia Pheochromocytoma Benign | Minimal |
| | [Pheochromocytoma Benign TGLs = 4-8] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus Hemorrhage | Minimal |
| | Bile Duct | Hyperplasia Mixed Cell Focus | Minimal |
| | [Hemorrhage TGLs = 1-7] [Mixed Cell Focus TGLs = 2-7] | | |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Minimal Chronic, Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Urinary Bladder | Urothelium | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 27

TRT#: 1

SEX: Male

DAY ON TEST: 663

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62637

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Larynx | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|----------------------|---------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Epididymis | Artery | Inflammation | Minimal |
| * Harderian Gland | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| Peripheral Nerve | Axon | Degeneration | Mild |
| Skeletal Muscle | | Degeneration | Mild |
| | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 28

TRT#: 1

SEX: Male

DAY ON TEST: 589

DOSE: Control

DISP: Natural Death

HISTO: 62638

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|--------------------------|-----------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| * Lung | Bile Duct | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 29

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62639

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * 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 | * Parathyroid Gland | Peripheral Nerve | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | Spinal Cord |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Thymus

OBSERVATIONS

| | | | |
|--------------------------|---------------------------------------|----------------------|---------|
| * Adrenal Cortex | | Adenoma | |
| | | Leukemia Mononuclear | |
| | [Adenoma TGLs = 9-8] | | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 8-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | | Leukemia Mononuclear | |
| Lymph Node | Renal Iliac | Leukemia Mononuclear | |
| | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 10-21] | | |
| | [Leukemia Mononuclear TGLs = 11-22] | | |
| * Lymph Node, Bronchial | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 1-5] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 29

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62639

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------------------|-------------------|-------------------------------|----------|
| [Leukemia Mononuclear | TGLs = 3-17] | | |
| * Lymph Node, Mediastinal | | Leukemia Mononuclear | |
| [Leukemia Mononuclear | TGLs = 2-4] | | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| [Leukemia Mononuclear | TGLs = 13-24] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pancreas | | Leukemia Mononuclear | |
| [Leukemia Mononuclear | TGLs = 7-20] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| [Cyst Epithelial Inclusion | TGLs = 12-23] | | |
| * Spleen | | Leukemia Mononuclear | |
| [Leukemia Mononuclear | TGLs = 4,5,6-19] | | |

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 590

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62640

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Epididymis | * 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 |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Testes | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|---------------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| | | Leukemia Mononuclear | |
| * Brain | Glial Cell | Hyperplasia | Moderate |
| * Esophagus | | Leukemia Mononuclear | |
| * Heart | | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Minimal |
| * Liver | | Leukemia Mononuclear | |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Leukemia Mononuclear | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mediastinal | | Leukemia Mononuclear | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| Mesentery | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 3,4-7] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | | Leukemia Mononuclear | |
| * Prostate | | Leukemia Mononuclear | |
| * Spleen | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 1,2-7] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 590

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62640

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach

Leukemia Mononuclear

* Stomach, Glandular

Leukemia Mononuclear

* Thymus

Leukemia Mononuclear

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 31

TRT#: 1

SEX: Male

DAY ON TEST: 485

DOSE: Control

DISP: Natural Death

HISTO: 62641

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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|---------------------|------------------------------|-------------------------------|-------------------|
| Blood Vessel | Aorta | Mineralization | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| | Epicardium | Inflammation | Minimal |
| | [Inflammation TGLs = 2-15] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Hepatocyte | Hyperplasia | Nodular, Moderate |
| | [Hyperplasia TGLs = 1-18] | Necrosis | Minimal |
| * Lung | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 32

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62642

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 | * Lymph Node, Mandibular |
| * 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 | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 618

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62643

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 5-13] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Infarct | Mild |
| | [Infarct TGLs = 8-19] | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Inflammation TGLs = 2-6] | Inflammation | Chronic, Minimal |
| Lymph Node | Deep Cervical | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 3-21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Mild |
| * Pituitary Gland | | Cyst | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 618

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62643

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|--------------------------------------|----------------------------------|----------|
| * Skin | Keratoacanthoma | Multiple |
| [Keratoacanthoma TGLs = 1,6-20+23] | | |
| * Spleen | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | Atrophy | Mild |
| Zymbal's Gland | Carcinoma | |
| [Carcinoma TGLs = 4,7-18+22] | | |

PRIMARY CAUSE OF DEATH - Zymbal's Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 34

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62644

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|------------------------|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma TGLs = 3-7] | | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Cyst | Moderate |
| [Cyst TGLs = 1,2-16] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 35

TRT#: 1

SEX: Male

DAY ON TEST: 533

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62645

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|------------------------------|-------------------|----------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| [Pheochromocytoma Malignant | TGLs = 4,5-8+18] | | |
| * Islets, Pancreatic | | Adenoma | |
| [Adenoma | TGLs = 3-7] | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | Hepatocyte | Necrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 36

TRT#: 1

SEX: Male

DAY ON TEST: 726

DOSE: Control

DISP: Natural Death

HISTO: 62646

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|----------------------|---------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 37

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62647

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|----------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 2-8] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 38

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62648

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 39

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62649

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * 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 | * Testes | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-----------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Eye | Iris | Leiomyoma | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | | Exudate | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 631

DOSE: Control

DISP: Natural Death

HISTO: 62650

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 1-18] | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 41

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62651

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| | | Vacuolization Cytoplasmic | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| [Congestion TGLs = 2-7] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Preputial Gland | | Inflammation | Minimal |
| [Inflammation TGLs = 1-16] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 42

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62652

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------|--|-------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 43

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62653

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|---------------------------------|----------------------------------|-------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Mild |
| | | Inflammation | Chronic Active, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-19+20] | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Glandular | | Ulcer | Moderate |
| | [Ulcer TGLs = 2-18] | | |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 723

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62654

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Brain | | Gliosis | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 2,3-8+18] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 4-5+6] | | |
| | [Inflammation TGLs = 5-6] | | |
| * Pancreas | Artery | Inflammation | Mild |
| Peripheral Nerve | Axon | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 1-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| Skeletal Muscle | | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 723

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62654

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------|--------|----------------------------------|----------|
| Spinal Cord | Nerve | Gliosis | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 45

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62655

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|-------------------|
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| | [Pheochromocytoma Malignant TGLs = 2-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Carcinoma | Metastatic (Lung) |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Carcinoma | |
| | [Carcinoma TGLs = 1-4] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 46

TRT#: 1

SEX: Male

DAY ON TEST: 516

DOSE: Control

DISP: Natural Death

HISTO: 62556

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|--------------------------|----------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Congestion | Mild |
| | [Congestion TGLs = 2-14] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 47

TRT#: 1

SEX: Male

DAY ON TEST: 493

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62657

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|---------------------------|-----------------------------|------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Islets, Pancreatic |
| * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Skin | Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------------|-----------------------------|-------------------------------|-------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Brain | Cerebellum | Necrosis | Mild |
| | Cerebrum | Necrosis | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Intestine Large, Cecum | Artery | Inflammation | Mild |
| * Intestine Small, Ileum | Artery | Inflammation | Mild |
| * Intestine Small, Jejunum | Artery | Inflammation | Mild |
| * Kidney | | Inflammation | Chronic Active, Minimal |
| | Renal Tubule | Mineralization | Mild |
| | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 2,3-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Olfactory Epi | Degeneration | Mild |
| | | Inflammation | Chronic Active, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 47

TRT#: 1

SEX: Male

DAY ON TEST: 493

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62657

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|----------------------|----------------|----------------|---------|
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Stomach, Glandular | | Mineralization | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 48

TRT#: 1

SEX: Male

DAY ON TEST: 584

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62658

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|-------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| * Skin | Subcut Tiss | Fibrous Histiocytoma | |
| | [Fibrous Histiocytoma TGLs = 1-18+19+20] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrous Histiocytoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 49

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62659

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | Sebaceous GI | Inflammation | Suppurative, Mild |
| | | Keratoacanthoma | |
| | [Inflammation TGLs = 1-18] | | |
| | [Keratoacanthoma TGLs = 3-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 537

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62660

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| Skeletal Muscle | Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|--------------------------------------|---------------|-------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Intestine Large, Colon | | Leiomyoma | |
| [Leiomyoma TGLs = 10-20] | | | |
| * Kidney | | Cyst | |
| [Nephropathy TGLs = 7,8,9-8+18+19] | | Nephropathy | Marked |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Hemorrhage | Minimal |
| [Inflammation TGLs = 6-5+6] | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Moderate |
| [Hyperplasia TGLs = 3-17] | | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion TGLs = 5-4] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| Peripheral Nerve | Axon | Degeneration | Minimal |
| * Preputial Gland | | Cyst | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 537

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62660

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | | |
|----------|------------------------------|-------------|--------------|----------|
| | [Inflammation TGLs = 1-16] | | Inflammation | Mild |
| * Skin | | Subcut Tiss | Hemangioma | |
| | [Hemangioma TGLs = 2-16] | | | |
| * Thymus | | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Adrenal Medulla Hyperplasia

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 201

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62911

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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| Blood Vessel | Aorta | Mineralization | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Lung | | Accumulation, Hyaline Droplet | Minimal |
| * Nose | Olfactory Epi | Atrophy | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hematopoietic Cell Proliferation | Minimal |
| * Spleen | | Atrophy | Moderate |
| * Testes | Germinal Epith | Hyperplasia | Mild |
| | Interstit Cell | Inflammation | Moderate |
| | Artery | Atrophy | Marked |
| * Thymus | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 202

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62912

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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminary Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|----------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Cyst | |
| | | Nephropathy | Mild |
| | | | |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 203

TRT#: 3

SEX: Male

DAY ON TEST: 525

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62913

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Islets, Pancreatic |
| * Larynx | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------------|--------------------------------|-------------------------------|----------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Intestine Small, Jejunum | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 3-19] | | |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Lung | | Edema | Mild |
| | | Hemorrhage | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Skin | | Inflammation | Moderate |
| | [Inflammation TGLs = 2-20] | | |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Intestine Small, Jejunum Adenocarcinoma

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 204

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62914

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|----------------------|---------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 2-18] | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Moderate |
| | [Atrophy TGLs = 1-9] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 205

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62915

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|---------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Skin | Subcut Tiss | Lipoma | |
| | [Lipoma TGLs = 1-18] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 206

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62916

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-----------------|---------------------|
| * Mammary Gland | * Parathyroid Gland |
|-----------------|---------------------|

OBSERVATIONS

| | | | |
|----------------------|---|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Brain | | Glioma Malignant | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Minimal |
| | [Cyst Epithelial Inclusion TGLs = 1-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 206

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62916

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------|--------------|---------|
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 207

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62917

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * 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 | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|----------------------|---|-------------------------------|---------------------|
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 1-13] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 5-7] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Hepatocellular Carcinoma | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Hepatocellular Carcinoma TGLs = 3-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 4-18] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 207

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62917

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 208

TRT#: 3

SEX: Male

DAY ON TEST: 618

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62918

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 |
| * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|-------------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 6-8+20] | | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 3,4,5-18+19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Cyst | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Interstit Cell | Adenoma | |
| | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Mild |
| | [Adenoma TGLs = 7-9] | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 209

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62919

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Alveolar/Bronchiolar Adenoma | |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Squamous Cell Papilloma | |
| | [Squamous Cell Papilloma TGLs = 1-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 210

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62920

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|-----------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Harderian Gland | | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Clear Cell Focus TGLs = 1-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | Renal | Ectasia | Mild |
| | Inguinal | Ectasia | Mild |
| | Lumbar | Ectasia | Mild |
| | [Ectasia TGLs = 4-19] | | |
| | [Ectasia TGLs = 5-20] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 210

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62920

ORGAN AND ACCOUNTABLE SITE STATUS

[Ectasia TGLs = 6-21]

| | | | |
|-------------------|---------------|----------------------------------|---------|
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 211

TRT#: 3

SEX: Male

DAY ON TEST: 710

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62921

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|--------------------------|---------------------------|--------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Ileum |
| * Islets, Pancreatic | * Mammary Gland | * Nose | * Parathyroid Gland |
| Peripheral Nerve | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------------------|--|-----------------------|---------------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Brain | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 1-2+18] | | |
| * Heart | | Leukemia Mononuclear | |
| * Intestine Small, Duodenum | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 9-24] | | |
| * Intestine Small, Jejunum | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 9-24] | | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Mild |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| | Hepatocyte | Necrosis | Mild |
| | [Leukemia Mononuclear TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Leukemia Mononuclear | |
| Lymph Node | Iliac | Leukemia Mononuclear | |
| | Renal | Leukemia Mononuclear | |
| | Pancreatic | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 211

TRT#: 3

SEX: Male

DAY ON TEST: 710

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62921

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLs = 6-18]

[Leukemia Mononuclear TGLs = 11-20]

[Leukemia Mononuclear TGLs = 8-23]

* Lymph Node, Mandibular

Leukemia Mononuclear

* Lymph Node, Mediastinal

Leukemia Mononuclear

* Lymph Node, Mesenteric

Leukemia Mononuclear

[Leukemia Mononuclear TGLs = 7-16]

Mesentery

Fat

Necrosis

Moderate

[Necrosis TGLs = 3,5-21+22]

* Pancreas

Leukemia Mononuclear

* Pituitary Gland

Cyst

Minimal

Pars Distalis

Hyperplasia

Minimal

Spinal Cord

Axon

Degeneration

Mild

* Spleen

Leukemia Mononuclear

Leukemia Mononuclear

Necrosis

Moderate

[Leukemia Mononuclear TGLs = 2,10-7+8]

* Thymus

Leukemia Mononuclear

* Thyroid Gland

C Cell

Hyperplasia

Moderate

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 212

TRT#: 3

SEX: Male

DAY ON TEST: 558

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62922

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--------------------------------|--------------|----------------|-----------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Epididymis | Artery | Inflammation | Mild |
| [Inflammation TGLs = 3-9] | | | |
| * Eye | Antr Chamber | Inflammation | Suppurative, Moderate |
| [Inflammation TGLs = 2-13] | | | |
| * Heart | | Cardiomyopathy | Minimal |
| [Cardiomyopathy TGLs = 1-15] | | | |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 4-8+19] | | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Seminal Vesicle | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 212

TRT#: 3

SEX: Male

DAY ON TEST: 558

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62922

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 213

TRT#: 3

SEX: Male

DAY ON TEST: 347

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62923

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Liver | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|----------|----------------|-------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 214

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62924

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 1-13] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 5,6-5] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Interstit Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 214

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62924

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|--------|--------------|--------|
| [Adenoma TGLs = 3-9] | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 215

TRT#: 3

SEX: Male

DAY ON TEST: 318

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62925

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|---|--|--|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Centrilobular, Hepatocyte Alveolus | Hypertrophy Infiltration Cellular Inflammation | Minimal Histiocyte, Minimal Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Skin | Subcut Tiss | Fibrous Histiocytoma | |
| | [Fibrous Histiocytoma TGLs = 1-18+19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrous Histiocytoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 216

TRT#: 3

SEX: Male

DAY ON TEST: 640

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62926

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--------------------------|-------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Large, Cecum | | Inflammation | Acute, Moderate |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| * Lymph Node, Mesenteric | | Congestion | Mild |
| | [Congestion TGLs = 3-18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 1-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 216

TRT#: 3

SEX: Male

DAY ON TEST: 640

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62926

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Glandular

Mineralization

Mild

* Testes

Artery

Inflammation

Minimal

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH

- Intestine Large, Cecum Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 217

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62927

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * 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 |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|---------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| * Nose | | Exudate | Minimal |
| * Pancreas | | Inflammation | Minimal |
| * Skin | | Keratoacanthoma | |
| | [Keratoacanthoma TGLs = 2-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | | Atrophy | Mild |
| | Germinal Epith | Inflammation | Moderate |
| | Artery | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 217

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62927

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Thyroid Gland

C Cell

Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 218

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62928

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|--|---------------|----------------------------------|-------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 6-18] | | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Fibrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 3,4-5+6] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 5-10] | | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Mild |
| | | Inflammation | Chronic Active, Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 218

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62928

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 219

TRT#: 3

SEX: Male

DAY ON TEST: 640

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62929

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * 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 | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|--------------------------|---|-------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Epididymis | Artery | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Large, Cecum | Artery | Inflammation | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Adenoma | |
| | [Adenoma TGLs = 1-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 2-19] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 220

TRT#: 3

SEX: Male

DAY ON TEST: 683

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62930

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 221

TRT#: 3

SEX: Male

DAY ON TEST: 717

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62931

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|----------------------------------|----------------------------------|------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Bile Duct | Clear Cell Focus | |
| | | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | [Mixed Cell Focus TGLs = 1-19] | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | | Ultimobranchial Cyst | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 222

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62932

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|----------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 1-8] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| | Alveolus | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | | Congestion | Mild |
| | [Congestion TGLs = 2-18] | | |
| * Nose | | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Exudate | Minimal |
| * Pancreas | | Inflammation | Mild |
| * Pituitary Gland | | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 223

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62933

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Seminal Vesicle | * Spleen |
| * Stomach, Glandular | * Trachea | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|---------------------------|------------------|
| * Adrenal Cortex | | Necrosis | Minimal |
| | | Thrombosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | Hypothalamus | Compression | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+20] | | |
| * Liver | | Fatty Change | Mild |
| | Bile Duct | Hyperplasia | Minimal |
| | | Vacuolization Cytoplasmic | Marked |
| * Lung | Alveolar Epith | Hyperplasia | Mild |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Hyperplasia TGLs = 8-20] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Prostate | | Inflammation | Moderate |
| | [Inflammation TGLs = 3-21] | | |
| * Skin | Subcut Tiss | Fibrosis | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 223

TRT#: 3

SEX: Male

DAY ON TEST: 715

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62933

ORGAN AND ACCOUNTABLE SITE STATUS

[Fibrosis TGLs = 2-18]

| | | | |
|------------------------------|------------|-----------------------------|------------------------------|
| * Stomach, Forestomach | Epithelium | Hyperplasia Inflammation | Mild Chronic Active, Mild |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |
| Tongue | Artery | Inflammation | Mild |
| [Inflammation TGLs = 6-18] | | | |
| * Urinary Bladder | | Inflammation | Mild |

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

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 224

TRT#: 3

SEX: Male

DAY ON TEST: 565

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62934

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * 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, Bronchial |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|--------------------------|--------------------------------|----------------------------------|-----------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | Artery | Inflammation | Moderate |
| | [Inflammation TGLs = 5-1] | | |
| * Eye | Cornea | Inflammation | Moderate |
| | [Inflammation TGLs = 1-13] | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Hepatocyte | Necrosis | Mild |
| * Lung | | Carcinoma | Metastatic (Zymbal'S Gland) |
| | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 2-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | | Carcinoma | Metastatic (Zymbal'S Gland) |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| Zymbal's Gland | | Carcinoma | |
| | [Carcinoma TGLs = 3,4-18+19] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 224

TRT#: 3

SEX: Male

DAY ON TEST: 565

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62934

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Zymbal's Gland Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Brain Artery Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 225

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62935

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 | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| Peripheral Nerve | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | Spinal Cord |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|---------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 226

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62936

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|----------------------|---------------------------|---------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 4-7] | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | Mediastinum | Paraganglioma | |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Preputial Gland | | Cyst | Mild |
| | [Cyst TGLs = 1-16] | | |
| * Skin | | Cyst Epithelial Inclusion | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 226

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62936

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst Epithelial Inclusion TGLs = 2-19]

| | | | |
|-----------------|--------|----------------------------------|----------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Moderate |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 227

TRT#: 3

SEX: Male

DAY ON TEST: 570

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62937

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Thyroid Gland

OBSERVATIONS

| | | | |
|-----------------------------|---------------|-------------------------------|-------------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 3-8] | | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| [Inflammation TGLs = 4-5] | | | |
| * Lymph Node, Mediastinal | | Hyperplasia | Mild |
| [Hyperplasia TGLs = 2-4] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 228

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62938

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------------|---------------------------|------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| Lymph Node | Renal | Ectasia | Mild |
| [Ectasia TGLs = 1-19] | | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 229

TRT#: 3

SEX: Male

DAY ON TEST: 724

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62939

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Brain |
| * Epididymis | * Esophagus | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Larynx | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Skin |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|---------------------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Eye | | Hemorrhage | Moderate |
| | Cornea | Inflammation | Mild |
| | [Hemorrhage TGLs = 3-13] | | |
| | [Inflammation TGLs = 2-13] | | |
| * Harderian Gland | | Atrophy | Mild |
| * Heart | | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 5-5+6] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mediastinal | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 4-4] | | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 7-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 229

TRT#: 3

SEX: Male

DAY ON TEST: 724

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62939

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|-------------------------------------|----------------------|---------|
| * Pancreas | | Exudate | Minimal |
| * Preputial Gland | | Leukemia Mononuclear | |
| * Seminal Vesicle | | Inflammation | Minimal |
| * Spleen | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 6-7] | Leukemia Mononuclear | |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Mild |
| | | Leukemia Mononuclear | |
| | | Ulcer | Mild |
| * Thymus | | Leukemia Mononuclear | |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 230

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62940

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * 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 | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Marked |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 4-8] | | |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Cyst | |
| | [Nephropathy TGLs = 2,3,5-8+19] | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hepatocellular Carcinoma | |
| | [Hepatocellular Carcinoma TGLs = 1-18] | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| Skeletal Muscle | | Hemangiosarcoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 230

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62940

ORGAN AND ACCOUNTABLE SITE STATUS

[Hemangiosarcoma TGLs = 6-20]

* Spleen

Hematopoietic Cell Proliferation

Minimal

* Testes

Artery

Inflammation

Moderate

* Thymus

Atrophy

Marked

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 231

TRT#: 3

SEX: Male

DAY ON TEST: 306

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62941

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|------------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Alveolus | Carcinoma | Metastatic (Salivary Glands) |
| | [Carcinoma TGLs = 2,3,4,5,6,7-5+6+18] | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Salivary Glands | | Carcinoma | |
| | [Carcinoma TGLs = 1,8-13+19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Salivary Glands Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 232

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62942

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 233

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62943

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|--------------------------|---------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------------|----------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Vacuolization Cytoplasmic | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | Bilateral | Pheochromocytoma Benign | |
| * Intestine Small, Jejunum | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 3-19] | | |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| * Lung | Alveolar Epith | Hyperplasia | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | | Cyst | Mild |
| | [Cyst TGLs = 4-10] | | |
| * Preputial Gland | | Inflammation | Mild |
| * Prostate | | Inflammation | Minimal |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 5-20+21+22+23] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 233

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62943

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------|-------------------|----------------------------------|----------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Moderate |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |
| [Adenoma TGLs = 2-4] | | | |
| Zymbal's Gland | | Adenoma | |
| [Adenoma TGLs = 1-18] | | | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 234

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62944

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|------------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18+19+20] | | |
| * Nose | | Exudate | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 235

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62945

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-----------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 2-8] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | | Angiectasis | Mild |
| | [Angiectasis TGLs = 1-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Fibroma | |
| | [Fibroma TGLs = 3-18] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 236

TRT#: 3

SEX: Male

DAY ON TEST: 631

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62946

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 2-18] | | |
| * Liver | | Eosinophilic Focus | |
| | | Hepatocellular Adenoma | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 237

TRT#: 3

SEX: Male

DAY ON TEST: 515

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62947

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|------------------------------|-----------------------|---------------------|
| * Eye | | Degeneration | Moderate |
| | [Degeneration TGLs = 2-13] | | |
| * Kidney | | Nephropathy | Mild |
| * Lung | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 238

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62948

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, Ileum |
| * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Preputial Gland |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------------------|--------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Small, Duodenum | Peyers Patch | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 5-21] | Hyperplasia | Lymphoid, Mild |
| * Intestine Small, Jejunum | Peyers Patch | Hyperplasia | Lymphoid, Mild |
| | [Hyperplasia TGLs = 5-21] | | |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 4-20] | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Prostate | | Inflammation | Mild |
| | [Inflammation TGLs = 2-17] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 238

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62948

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|---|---|--------|
| * Skin | Sebaceous Gland | Adenoma Keratoacanthoma Squamous Cell Papilloma | |
| | [Keratoacanthoma TGLs = 3-19] | | |
| | [Squamous Cell Papilloma TGLs = 1-18] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 239

TRT#: 3

SEX: Male

DAY ON TEST: 607

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62949

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|--------------------------------|----------------------------------|---------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Moderate |
| | [Cardiomyopathy TGLs = 2-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Mild |
| Lymph Node | Renal | Congestion | Mild |
| | Lumbar | Hyperplasia | Minimal |
| | [Congestion TGLs = 5-19] | | |
| | [Hyperplasia TGLs = 6-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 239

TRT#: 3

SEX: Male

DAY ON TEST: 607

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62949

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|----------------|----------------|----------|
| * Stomach, Forestomach | | Mineralization | Mild |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | Follicular Cel | Hyperplasia | Marked |
| | Follicular Cel | Hypertrophy | Marked |

[Hyperplasia TGLs = 1-4]

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 240

TRT#: 3

SEX: Male

DAY ON TEST: 643

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62950

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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Mediastinal

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | Bile Duct | Eosinophilic Focus | |
| | | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 241

TRT#: 3

SEX: Male

DAY ON TEST: 310

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62951

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | Peripheral Nerve |
| * Pituitary Gland | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | |

OBSERVATIONS

| | | | |
|-------------------|---|---|---|
| * Kidney | Pelvis | Dilatation Nephropathy | Mild Minimal |
| * Lung | Alveolus | Infiltration Cellular Inflammation Metaplasia | Histiocyte, Minimal Chronic, Minimal Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Prostate | | Inflammation | Mild |
| Skeletal Muscle | | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 2-18+20] | | |
| Spinal Cord | | Schwannoma Malignant | Metastatic (Skeletal Muscle) |
| * Urinary Bladder | | Inflammation | Moderate |
| | [Inflammation TGLs = 1-19] | | |

PRIMARY CAUSE OF DEATH - Spinal Cord Schwannoma Malignant Skeletal Muscle

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 242

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62952

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Marked |
| | Artery | Inflammation | Marked |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 243

TRT#: 3

SEX: Male

DAY ON TEST: 485

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62953

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 |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | Atrium | Cardiomyopathy | Mild |
| | [Thrombosis TGLs = 3,4,14-15+23] | Thrombosis | Marked |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Degeneration | Cystic, Minimal |
| | [Hemorrhage TGLs = 8,9-7+19] | Hemorrhage | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 5-5+6+18] | Metaplasia | Osseous, Mild |
| Lymph Node | Renal | Congestion | Mild |
| | Lumbar | Congestion | Mild |
| | Axillary | Congestion | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 243

TRT#: 3

SEX: Male

DAY ON TEST: 485

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62953

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------------------|--------|--------------|----------|
| [Congestion TGLs = 12-21] | | | |
| [Congestion TGLs = 13-22] | | | |
| [Congestion TGLs = 15-25] | | | |
| * Lymph Node, Mandibular | | Congestion | Mild |
| [Congestion TGLs = 1-20] | | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion TGLs = 2-4] | | | |
| * Lymph Node, Mesenteric | | Congestion | Mild |
| [Congestion TGLs = 11-14] | | | |
| * Nose | | Exudate | Minimal |
| | | Foreign Body | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | | Edema | Moderate |
| [Edema TGLs = 7-24] | | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Heart Atrium Thrombosis

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 244

TRT#: 3

SEX: Male

DAY ON TEST: 303

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62954

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|---------------------|
| * Kidney | Pelvis | Dilatation | Moderate |
| | Renal Tubule | Mineralization | Moderate |
| | | | |
| | [Dilatation TGLs = 6-8] | | |
| | [Mineralization TGLs = 5-8] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Prostate | | Inflammation | Mild |
| | | | |
| | [Inflammation TGLs = 4-17] | | |
| * Seminal Vesicle | | Inflammation | Mild |
| | | | |
| | [Inflammation TGLs = 3-18] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Urinary Bladder | | Necrosis | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 244

TRT#: 3

SEX: Male

DAY ON TEST: 303

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62954

ORGAN AND ACCOUNTABLE SITE STATUS

[Necrosis TGLs = 2-10]

PRIMARY CAUSE OF DEATH - Kidney Pelvis Dilatation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 245

TRT#: 3

SEX: Male

DAY ON TEST: 695

DOSE: 100 ppm

DISP: Natural Death

HISTO: 62955

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|----------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Mediastinum | Hemorrhage | Moderate |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Preputial Gland | | Inflammation | Mild |
| * Stomach, Glandular | | Ulcer | Mild |
| | [Ulcer TGLs = 4-18] | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Lung Mediastinum Hemorrhage

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 246

TRT#: 3

SEX: Male

DAY ON TEST: 676

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62956

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| * Skin | Spinal Cord | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | [Pheochromocytoma Benign TGLs = 6-8] | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 5-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| Mesentery | Fat | Necrosis | Mild |
| | [Necrosis TGLs = 4-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 246

TRT#: 3

SEX: Male

DAY ON TEST: 676

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62956

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Artery

Inflammation

Mild

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 247

TRT#: 3

SEX: Male

DAY ON TEST: 680

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62957

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Epididymis | Artery | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 6-8+18] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 7-16] | | |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 1-20+21+22] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 247

TRT#: 3

SEX: Male

DAY ON TEST: 680

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62957

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|---|----------------------------------|----------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | | Squamous Cell Papilloma | |
| | [Squamous Cell Papilloma TGLs = 9-19] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Moderate |
| | [Adenoma TGLs = 2-4] | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 248

TRT#: 3

SEX: Male

DAY ON TEST: 589

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62958

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------------|---|---------------------------|-------------------|
| * Adrenal Cortex | | Thrombosis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | Hepatocyte | Necrosis | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 1-5+6] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 7-19] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 2-4] | | |
| * Pancreas | Acinus | Adenoma | |
| | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| | [Adenoma TGLs = 5-21] | | |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 4-20] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 248

TRT#: 3

SEX: Male

DAY ON TEST: 589

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62958

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|---|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | | Squamous Cell Papilloma | |
| | [Squamous Cell Papilloma TGLs = 6-10] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 249

TRT#: 3

SEX: Male

DAY ON TEST: 650

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62959

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 | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|-------------------|
| * Adrenal Cortex | | Necrosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 8-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| | Atrium | Thrombosis | Moderate |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 7-8+19] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Degeneration | Cystic, Minimal |
| | | Fatty Change | Minimal |
| * Lung | | Alveolar/Bronchiolar Adenoma | |
| | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | Sebaceous Gl | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 249

TRT#: 3

SEX: Male

DAY ON TEST: 650

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62959

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|---------------------------|------------|-------------|----------|
| [Adenoma TGLs = 4-20] | | | |
| * Spleen | Red Pulp | Congestion | Minimal |
| [Congestion TGLs = 5-7] | | | |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Heart Atrium Thrombosis

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 250

TRT#: 3

SEX: Male

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62960

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 | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| Peripheral Nerve | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | Spinal Cord | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|------------------------------|--------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 2-18] | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 1-16] | | |
| Skeletal Muscle | | Regeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 250

TRT#: 3

SEX: Male

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62960

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Hematopoietic Cell Proliferation

Minimal

* Thymus

Atrophy

Moderate

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 401

TRT#: 5

SEX: Male

DAY ON TEST: 463

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62811

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * 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 | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|------------------|---------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Heart | Endocardium | Schwannoma Malignant | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Heart Endocardium Schwannoma Malignant

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 402

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62812

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|--------------------------|----------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 3-13] | | |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | [Clear Cell Focus TGLs = 2-18] | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Lymph Node, Mandibular | | Ectasia | Mild |
| | [Ectasia TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| | [Adenoma TGLs = 5-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 402

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62812

ORGAN AND ACCOUNTABLE SITE STATUS

* Preputial Gland

Inflammation

Minimal

* Spleen

Hematopoietic Cell Proliferation

Minimal

* Thymus

Atrophy

Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 403

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62813

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|----------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 3-8] | | |
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 1-13] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 4-16] | | |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Clear Cell Focus TGLs = 2-18] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 403

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62813

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|----------------------------------|----------|
| * Pancreas | Artery | Inflammation | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 404

TRT#: 5

SEX: Male

DAY ON TEST: 669

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62814

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Parathyroid Gland |
| Peripheral Nerve | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | Spinal Cord |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|---|---------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Marked |
| | | Pheochromocytoma Benign | |
| * Eye | Cornea | Inflammation | Moderate |
| [Inflammation TGLs = 2-13] | | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 6-8+18] | | | |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| [Hematopoietic Cell Proliferation TGLs = 5-7] | | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 404

TRT#: 5

SEX: Male

DAY ON TEST: 669

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62814

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 405

TRT#: 5

SEX: Male

DAY ON TEST: 678

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62815

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|---------------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Eye | Cornea | Inflammation | Mild |
| | [Inflammation TGLs = 6-13] | | |
| * Heart | Atrium, Myocardium | Cardiomyopathy | Mild |
| | Atrium | Inflammation | Moderate |
| | | Thrombosis | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 7-18] | | |
| * Larynx | | Inflammation | Minimal |
| | | Metaplasia | Squamous, Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 5-5+6] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 4-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 405

TRT#: 5

SEX: Male

DAY ON TEST: 678

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62815

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy
CONTRIBUTORY CAUSE OF DEATH - Heart Atrium Thrombosis

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 406

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62816

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Hemorrhage | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 407

TRT#: 5

SEX: Male

DAY ON TEST: 635

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62817

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|--|-----------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Eye | Cornea | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+19] | | |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| | [Necrosis TGLs = 6-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 4-16] | | |
| * Nose | | Exudate | Minimal |
| | | Hemorrhage | Mild |
| | [Hemorrhage TGLs = 1-12+18+20] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 407

TRT#: 5

SEX: Male

DAY ON TEST: 635

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62817

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Germinal Epith

Atrophy

Mild

Artery

Inflammation

Mild

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 408

TRT#: 5

SEX: Male

DAY ON TEST: 530

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62818

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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|---------------------------------|-------------------------|------------------|
| * Adrenal Cortex | | Necrosis | Minimal |
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| Blood Vessel | Aorta | Mineralization | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2,3-8+18] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Parathyroid Gland | | Hyperplasia | Moderate |
| * Stomach, Glandular | | Mineralization | Mild |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 408

TRT#: 5

SEX: Male

DAY ON TEST: 530

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62818

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 409

TRT#: 5

SEX: Male

DAY ON TEST: 697

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62819

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 410

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62820

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Lipoma | |
| | | Nephropathy | Mild |
| | [Lipoma TGLs = 1-18] | | |
| * Liver | | Clear Cell Focus | |
| | | Degeneration | Cystic, Minimal |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Skin | Sebaceous GI | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 410

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62820

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------------------------------------|----------------------------------|---------|
| | Subcut Tiss | Schwannoma Malignant | |
| | [Adenoma TGLs = 4-16] | | |
| | [Schwannoma Malignant TGLs = 3-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 411

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62821

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------------|---------------|-------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| * Lung | Bile Duct | Hyperplasia | Minimal |
| | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 1-10] | | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 412

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62822

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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|---------------------------|-------------------------------|----------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | Sebaceous GI | Adenoma | |
| | [Adenoma TGLs = 1-18] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 413

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62823

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|--------------------------|--------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Islets, Pancreatic | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Parathyroid Gland | * Prostate | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------------------|---------------------------|-----------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Small, Duodenum | Peyers Patch | Hyperplasia | Lymphoid, Moderate |
| [Hyperplasia TGLs = 2-20] | | | |
| * Intestine Small, Ileum | Peyers Patch | Hyperplasia | Lymphoid, Moderate |
| [Hyperplasia TGLs = 2-20] | | | |
| * Intestine Small, Jejunum | Peyers Patch | Hyperplasia | Lymphoid, Moderate |
| [Hyperplasia TGLs = 2-20] | | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | | Lymphoma Malignant | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Preputial Gland | | Inflammation | Minimal |
| * Salivary Glands | | Inflammation | Mild |
| * Skin | Subcut Tiss | Schwannoma Malignant | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 413

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62823

ORGAN AND ACCOUNTABLE SITE STATUS

[Schwannoma Malignant TGLs = 1-19]

| | | | |
|-----------------|--------|----------------------------------|----------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 414

TRT#: 5

SEX: Male

DAY ON TEST: 691

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62824

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|--------------------------|-------------------------------|------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Preputial Gland | | Cyst | Mild |
| | [Cyst TGLs = 2-16] | | |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Carcinoma | |
| | [Carcinoma TGLs = 1-4] | | |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 415

TRT#: 5

SEX: Male

DAY ON TEST: 683

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62825

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-----------------|--|----------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | | Ultimobranchial Cyst | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 416

TRT#: 5

SEX: Male

DAY ON TEST: 514

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62826

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * 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

OBSERVATIONS

| | | | |
|-------------------|---|---------------------------|------------------|
| * Adrenal Cortex | | Necrosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Epididymis | Artery | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 5,6-8+18+19] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Inflammation | Chronic, Minimal |
| Mesentery | Fat | Necrosis | Mild |
| | [Necrosis TGLs = 4-18] | | |
| * Nose | Olfactory Epi | Degeneration | Minimal |
| * Pancreas | | Inflammation | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 3-16] | | |
| * Testes | Artery | Inflammation | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 417

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62827

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--------------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Keratoacanthoma | Multiple |
| | | Ulcer | Mild |
| | [Keratoacanthoma TGLs = 2,4-16+18] | | |
| | [Ulcer TGLs = 3-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Interstit Cell | Adenoma | |
| | [Adenoma TGLs = 1-9] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 417

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62827

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 418

TRT#: 5

SEX: Male

DAY ON TEST: 674

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62828

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * Bone | * Brain | * 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, Mandibular | * Lymph Node, Mesenteric | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | | |
|-------------------------|-----------------|----------|
| * Lymph Node, Bronchial | * Mammary Gland | * Thymus |
|-------------------------|-----------------|----------|

OBSERVATIONS

| | | | |
|---------------------------|---------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Thrombosis | Moderate |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Hyperplasia | Marked |
| * Epididymis | | Mesothelioma Malignant | |
| * Eye | Cornea | Inflammation | Minimal |
| * Heart | | Congestion | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 5,8-8+19] | | |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 6,7-16+20] | | |
| * Lymph Node, Mediastinal | | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 2-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Duct | Cyst | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 418

TRT#: 5

SEX: Male

DAY ON TEST: 674

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62828

ORGAN AND ACCOUNTABLE SITE STATUS

[Cyst TGLs = 4-18]

* Parathyroid Gland

Hyperplasia

Mild

* Preputial Gland

Carcinoma

[Carcinoma TGLs = 1-16]

* Spleen

Hematopoietic Cell Proliferation

Mild

[Hematopoietic Cell Proliferation TGLs = 3-7]

* Testes

Germinal Epith

Atrophy

Moderate

Artery

Inflammation

Moderate

* Thyroid Gland

C Cell

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 419

TRT#: 5

SEX: Male

DAY ON TEST: 697

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62829

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Carcinoma | |
| | [Carcinoma TGLs = 2-8] | | |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 3-13] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 420

TRT#: 5

SEX: Male

DAY ON TEST: 607

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62830

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Larynx |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|----------------------|---|-------------------------------|---------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 2-7] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Edema | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Edema TGLs = 4-6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 1-16] | | |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 421

TRT#: 5

SEX: Male

DAY ON TEST: 689

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62831

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Eye | Cornea | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 1,2-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 422

TRT#: 5

SEX: Male

DAY ON TEST: 618

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62832

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|----------------------|---------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1,2-8+18] | | |
| * Liver | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 5-18] | | |
| * Nose | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 422

TRT#: 5

SEX: Male

DAY ON TEST: 618

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62832

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|----------|---|----------------------------------|---------|
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | | Edema | Minimal |
| | [Cyst Epithelial Inclusion TGLs = 3-16] | | |
| | [Edema TGLs = 4-19] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 423

TRT#: 5

SEX: Male

DAY ON TEST: 611

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62833

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 |
| * Islets, Pancreatic | * Larynx | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

- | | |
|-----------------|-------------------|
| * Mammary Gland | * Pituitary Gland |
|-----------------|-------------------|

OBSERVATIONS

- | | | | |
|---|---------------------------|-------------------------------|-------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| Blood Vessel | Aorta | Mineralization | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Intestine Small, Jejunum | | Adenocarcinoma | |
| [Adenocarcinoma TGLs = 5-16] | | | |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 3-8+19] | | | |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| [Inflammation TGLs = 2-5+6+18] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | Subcut Tiss | Hemangioma | |
| [Cyst Epithelial Inclusion TGLs = 1-20] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 423

TRT#: 5

SEX: Male

DAY ON TEST: 611

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62833

ORGAN AND ACCOUNTABLE SITE STATUS

[Hemangioma TGLs = 4-21]

| | | | |
|----------|--------|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Intestine Small, Jejunum Adenocarcinoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 424

TRT#: 5

SEX: Male

DAY ON TEST: 597

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62834

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|------------------------------------|-------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+16] | | |
| * Liver | | Fatty Change | Moderate |
| | | Hypertrophy | Mild |
| * Lung | Centrilobular, Hepatocyte | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| | [Inflammation TGLs = 2,3-5+6+18] | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 5-19] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 424

TRT#: 5

SEX: Male

DAY ON TEST: 597

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62834

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|----------|----------------|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 425

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62835

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------|---------------------------|----------------------------------|------------------------------|
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| [Pheochromocytoma Malignant | TGLs = 5-18] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy | TGLs = 4-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | | Inflammation | Chronic, Moderate |
| | | Metaplasia | Osseous, Minimal |
| | | Pheochromocytoma Malignant | Metastatic (Adrenal Medulla) |
| [Infiltration Cellular | TGLs = 3-5+6] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion | TGLs = 2-4] | | |
| * Pancreas | Acinus | Atrophy | Mild |
| | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 425

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62835

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Germinal Epith

Atrophy

Mild

Artery

Inflammation

Moderate

[Atrophy TGLs = 6-9]

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 426

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62836

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-----------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | [Eosinophilic Focus TGLs = 3-7] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18+19+20+21+22] | | |
| * Nose | Olfactory Epi | Degeneration | Minimal |
| * Pancreas | Acinus | Adenoma | |
| | Acinus | Hyperplasia | Minimal |
| | [Adenoma TGLs = 4-22] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 426

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62836

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|------------------------------------|----------------------------------|-------------|
| [Hyperplasia TGLs = 5-7] | | |
| * Parathyroid Gland | Hyperplasia | Minimal |
| * Pituitary Gland | Cyst | Minimal |
| | Pars Distalis | Hyperplasia |
| * Skin | Basal Cell Adenoma | Minimal |
| [Basal Cell Adenoma TGLs = 2-16] | | |
| * Spleen | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 427

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62837

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | * Skin |
| Spinal Cord | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 5-8] | | |
| * Epididymis | Artery | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+21] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Cyst TGLs = 4-20] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 1-19] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 3-20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 427

TRT#: 5

SEX: Male

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62837

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|----------------|--------------|----------|
| * Preputial Gland | | Inflammation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Moderate |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 428

TRT#: 5

SEX: Male

DAY ON TEST: 655

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62838

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|-------------------------------|-------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1,2-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 3-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 429

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62839

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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 430

TRT#: 5

SEX: Male

DAY ON TEST: 534

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62840

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------------|---|-------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 6-8+19] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 4,5-5+18] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 7-18] | | |
| * Lymph Node, Mandibular | | Congestion | Mild |
| | [Congestion TGLs = 1-17] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 3-4] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 430

TRT#: 5

SEX: Male

DAY ON TEST: 534

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62840

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|------------------------|----------------------------------|----------|
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Moderate |
| | [Atrophy TGLs = 2-9] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 431

TRT#: 5

SEX: Male

DAY ON TEST: 618

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62841

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Pituitary Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|-------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Cyst | |
| | | Nephropathy | Marked |
| | [Cyst TGLs = 4-18] | | |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Moderate |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Cyst | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 431

TRT#: 5

SEX: Male

DAY ON TEST: 618

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62841

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------|--------------|--------|
| * Thymus | Artery | Inflammation | Mild |
| * Thyroid Gland | C Cell | Atrophy | Marked |
| | | Hyperplasia | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 432

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62842

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | Sebaceous Gl | Cyst | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 432

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62842

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|----------|------------------------|----------------------------------|---------|
| | Subcut Tiss | Lipoma | |
| | [Cyst TGLs = 2-20] | | |
| | [Lipoma TGLs = 1-18] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| | | Cyst | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 433

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62843

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Larynx | * 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 | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Eye | Cornea | Inflammation | Minimal |
| * Harderian Gland | | Atrophy | Mild |
| | | Histiocytic Sarcoma | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pituitary Gland | Pars Distalis | Histiocytic Sarcoma | |
| | [Histiocytic Sarcoma TGLs = 1-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 434

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62844

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 1-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Keratoacanthoma | |
| | [Keratoacanthoma TGLs = 2-19] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 435

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62845

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Nose | * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland |
| * Salivary Glands | * Seminal Vesicle | Skeletal Muscle | Spinal Cord |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|---------------------------|---|-------------------------|---------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 3-18] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4,5-8+19] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 8-22] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 7-4] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-21] | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Prostate | | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 435

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62845

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|------------------------------------|--------------------|----------|
| * Skin | | Basal Cell Adenoma | |
| | [Basal Cell Adenoma TGLs = 1-20] | | |
| * Spleen | Lymph Follic | Hyperplasia | Mild |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |
| | C Cell | Hyperplasia | Moderate |
| | [Adenoma TGLs = 6-4] | | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 436

TRT#: 5

SEX: Male

DAY ON TEST: 500

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62846

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 |
| * Lymph Node, Bronchial | * 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 | * Testes |
| * Trachea | * Urinary Bladder | | |

AUTO PRECLUDES DIAG.

* Thyroid Gland

OBSERVATIONS

| | | | |
|--------------------------|--------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Pheochromocytoma Benign | |
| | [Cardiomyopathy TGLs = 2-15] | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 437

TRT#: 5

SEX: Male

DAY ON TEST: 571

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62847

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Liver | * 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 |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--------------------------|--|-------------------------|------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 2-8] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| * Lung | | Hemorrhage | Minimal |
| | [Inflammation TGLs = 3-6] | Inflammation | Chronic, Minimal |
| * Lymph Node, Mandibular | | Congestion | Mild |
| | [Congestion TGLs = 1-17] | | |
| * Nose | | Exudate | Minimal |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANATOMY PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 438

TRT#: 5

SEX: Male

DAY ON TEST: 703

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | Peripheral Nerve |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| Spinal Cord | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|--------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Clear Cell Focus TGLs = 7-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 4-5+6] | | |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Preputial Gland | | Cyst | Mild |
| | [Cyst TGLs = 6-16] | | |
| * Skin | | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 438

TRT#: 5

SEX: Male

DAY ON TEST: 703

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62848

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 5-20]

| | | | |
|-----------------|----------------|--------------|---------|
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Follicular Cel | Adenoma | |
| | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 439

TRT#: 5

SEX: Male

DAY ON TEST: 528

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62849

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | | | |

OBSERVATIONS

| | | | |
|-------------------|--------------------------------|--|-------------------|
| * Adrenal Medulla | | Hyperplasia Pheochromocytoma Benign | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| | [Cardiomyopathy TGLs = 1-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 3,4-19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Urinary Bladder | Urothelium | Papilloma | |
| | [Papilloma TGLs = 5-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 439

TRT#: 5

SEX: Male

DAY ON TEST: 528

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62849

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 440

TRT#: 5

SEX: Male

DAY ON TEST: 626

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62850

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Mild |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | Pars Distalis | Necrosis | Moderate |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 440

TRT#: 5

SEX: Male

DAY ON TEST: 626

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62850

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

Ultimobranchial Cyst

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 441

TRT#: 5

SEX: Male

DAY ON TEST: 696

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62851

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * 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 | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--------------------------|------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Bone | | Osteosarcoma | |
| | [Osteosarcoma TGLs = 2-18] | | |
| * Brain | Unilateral | Compression | Marked |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Larynx | | Inflammation | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 1-5] | | |
| * Lymph Node, Mesenteric | | Hemorrhage | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Bone Osteosarcoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 442

TRT#: 5

SEX: Male

DAY ON TEST: 607

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62852

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Malignant | |
| | [Pheochromocytoma Malignant TGLs = 5-8] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Cyst | |
| | | Nephropathy | Marked |
| | [Cyst TGLs = 3-8+18] | | |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 442

TRT#: 5

SEX: Male

DAY ON TEST: 607

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62852

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 443

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62853

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|---------------------|------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Moderate |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| * Parathyroid Gland | | Hyperplasia | Minimal |
| * Pituitary Gland | | Angiectasis | Mild |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 1-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 444

TRT#: 5

SEX: Male

DAY ON TEST: 477

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62854

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|---------------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Centrilobular, Hepatocyte | Necrosis | Mild |
| * Lung | | Fibrosis | Mild |
| | Alveolus | Hemorrhage | Mild |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 5-5+6] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 4-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 445

TRT#: 5

SEX: Male

DAY ON TEST: 632

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62855

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| | | Metaplasia | Osseous, Minimal |
| | [Inflammation TGLs = 1-5+6] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 3,4-16+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Minimal |
| | Artery | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 445

TRT#: 5

SEX: Male

DAY ON TEST: 632

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62855

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 446

TRT#: 5

SEX: Male

DAY ON TEST: 590

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62856

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | Subcut Tiss | Fibroma | |
| | [Fibroma TGLs = 1-19+20+21+22+23+24+25] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Testes | Germinal Epith | Atrophy | Mild |
| * Thymus | | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 447

TRT#: 5

SEX: Male

DAY ON TEST: 603

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62857

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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Thymus

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 448

TRT#: 5

SEX: Male

DAY ON TEST: 528

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62858

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | | Glioma Malignant | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| | [Cyst TGLs = 1-10] | | |
| * Testes | Interstitial Cell | Adenoma | |
| | Germinal Epith | Atrophy | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Brain Glioma Malignant

CONTRIBUTORY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 449

TRT#: 5

SEX: Male

DAY ON TEST: 726

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62859

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 450

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62860

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------|---------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 4-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 3-8] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 2-5+6] | | |
| Lymph Node | Iliac | Ectasia | Mild |
| | [Ectasia TGLs = 5-18] | | |
| * Nose | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 450

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62860

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|-----------------------------|----------------------------------|---------|
| * Salivary Glands | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Tunic | Inflammation | Minimal |
| | [Inflammation TGLs = 1-9] | | |
| * Thymus | | Atrophy | Marked |
| | | Hematopoietic Cell Proliferation | Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 601

TRT#: 7

SEX: Male

DAY ON TEST: 516

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62711

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | Peripheral Nerve |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | Skeletal Muscle | * Skin | Spinal Cord |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|---------------------------|-------------------------------|----------------------------------|-------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 6-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Alveolar/Bronchiolar Adenoma | |
| | | Fibrosis | Mild |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Hemorrhage TGLs = 3-5+6] | | |
| | Lymph Node | Congestion | Mild |
| | [Congestion TGLs = 7-19] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 5-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Mild |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 601

TRT#: 7

SEX: Male

DAY ON TEST: 516

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62711

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 602

TRT#: 7

SEX: Male

DAY ON TEST: 715

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62712

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|---------------------------|--|--------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Heart | Atrium | Thrombosis | Moderate |
| | [Thrombosis TGLs = 5,6-15] | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 13-7] | | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 8,9,10,11-5+6+18] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 7-4] | | |
| * Nose | | Exudate | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 12-10] | | |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 3-16] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 602

TRT#: 7

SEX: Male

DAY ON TEST: 715

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62712

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Lung Inflammation

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 603

TRT#: 7

SEX: Male

DAY ON TEST: 668

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62713

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|----------------------------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+19] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 3-5+6+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | | Cyst | Minimal |
| | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 603

TRT#: 7

SEX: Male

DAY ON TEST: 668

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62713

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|--------|--------------|---------|
| * Thymus | Artery | Inflammation | Mild |
| * Thyroid Gland | C Cell | Atrophy | Marked |
| | | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 604

TRT#: 7

SEX: Male

DAY ON TEST: 486

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62714

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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|---|---------------------------|------------------|
| Blood Vessel | Aorta | Mineralization | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1,2-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | Artery | Inflammation | Moderate |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 3-16] | | |
| * Stomach, Glandular | | Mineralization | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 605

TRT#: 7

SEX: Male

DAY ON TEST: 672

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62715

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | Skeletal Muscle |
| Spinal Cord | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|----------|-------------------------------|-------------------------------|------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Nose | | Accumulation, Hyaline Droplet | Minimal |
| * Skin | | Ulcer | Moderate |
| | [Ulcer TGLs = 1,2-19+20+21] | | |
| * Testes | | Inflammation | Minimal |
| * Thymus | Artery | Atrophy | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy
 CONTRIBUTORY CAUSE OF DEATH - Skin Ulcer

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 606

TRT#: 7

SEX: Male

DAY ON TEST: 573

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62716

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * 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 |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------|---------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| [Pheochromocytoma Malignant | TGLs = 3-18] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| [Hyperplasia | TGLs = 2-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular | TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 607

TRT#: 7

SEX: Male

DAY ON TEST: 486

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62717

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * 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 | * Testes |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|----------------------------------|----------------------------------|-------------------|
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2,3-8+20] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Hemorrhage TGLs = 4,5-5+6+19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | | Exudate | Minimal |
| | Olfactory Epi | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 608

TRT#: 7

SEX: Male

DAY ON TEST: 528

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62718

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Islets, Pancreatic | * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------------------|--|-------------------------|---------------------|
| * Adrenal Medulla | Bilateral | Pheochromocytoma Benign | |
| * Heart | Endocardium | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 1,2-15] | | |
| * Intestine Small, Duodenum | | Hemorrhage | Moderate |
| | [Hemorrhage TGLs = 8-14] | | |
| * Intestine Small, Ileum | | Hemorrhage | Moderate |
| | [Hemorrhage TGLs = 11-14] | | |
| * Intestine Small, Jejunum | | Inflammation | Moderate |
| | [Inflammation TGLs = 9-14] | | |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 6-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Schwannoma Malignant | Metastatic (Heart) |
| | [Hypertrophy TGLs = 4,5-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 608

TRT#: 7

SEX: Male

DAY ON TEST: 528

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62718

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------|----------------|-------------------------------|--------------------|
| | Artery | Schwannoma Malignant | Metastatic (Heart) |
| [Infiltration Cellular | TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Salivary Glands | | Inflammation | Mild |
| * Spleen | Red Pulp | Congestion | Mild |
| [Congestion | TGLs = 7-7] | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Heart Endocardium Schwannoma Malignant

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 609

TRT#: 7

SEX: Male

DAY ON TEST: 727

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62719

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|---------------------------------|---------------------------|-------------------------------|---------------|
| * Adrenal Cortex | Zona Fasciata | Atrophy | Marked |
| [Atrophy TGLs = 9-8] | | | |
| * Epididymis | | Atrophy | Marked |
| [Atrophy TGLs = 7-9] | | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 8-8+18] | | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Foreign Body | |
| | | Inflammation | Chronic, Mild |
| [Inflammation TGLs = 5-5+6] | | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion TGLs = 4-4] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 10-10] | | | |
| * Preputial Gland | | Inflammation | Mild |
| [Inflammation TGLs = 3,11-16] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 609

TRT#: 7

SEX: Male

DAY ON TEST: 727

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62719

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|----------------|--------------|----------|
| * Prostate | | Atrophy | Marked |
| * Seminal Vesicle | | Atrophy | Marked |
| * Testes | Germinal Epith | Atrophy | Moderate |
| | Artery | Inflammation | Mild |
| [Atrophy TGLs = 6-9] | | | |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 610

TRT#: 7

SEX: Male

DAY ON TEST: 661

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62720

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Infiltration Cellular | Histiocyte, Minimal |
| | Alveolus | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Exudate | Minimal |
| * Pancreas | | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 1-16] | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Animal Note: corrected histology number

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 611

TRT#: 7

SEX: Male

DAY ON TEST: 704

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62721

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 | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|---------------------------------|---------------------------|----------------------------------|---------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| Blood Vessel | Aorta | Mineralization | Moderate |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy TGLs = 1,2-8+18] | | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Inflammation | Chronic, Mild |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 612

TRT#: 7

SEX: Male

DAY ON TEST: 616

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62722

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|---------------------|-------------------------------|---------------------------|-------------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 1-8+18] | | |
| * Liver | | Bile Duct | Hyperplasia |
| | | Centrilobular, Hepatocyte | Hypertrophy |
| | [Hypertrophy TGLs = 2-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | | Olfactory Epi | Accumulation, Hyaline Droplet |
| | | Exudate | Minimal |
| * Parathyroid Gland | | Hyperplasia | Focal, Minimal |
| * Testes | | Artery | Inflammation |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Follicular Cel | Adenoma |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 613

TRT#: 7

SEX: Male

DAY ON TEST: 718

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62723

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|-------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 3-8] | | |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Hypertrophy | Mild |
| * Lung | | Centrilobular, Hepatocyte | |
| | | Alveolar/Bronchiolar Carcinoma | |
| | | Foreign Body | |
| | | Inflammation | Chronic, Minimal |
| | | Inflammation | Suppurative, Mild |
| | Bronchiole | | |
| | [Alveolar/Bronchiolar Carcinoma TGLs = 1-18] | | |
| | [Inflammation TGLs = 2-5+6+18] | | |
| * Nose | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Prostate | | Inflammation | Minimal |
| | [Inflammation TGLs = 7-17] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 613

TRT#: 7

SEX: Male

DAY ON TEST: 718

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62723

ORGAN AND ACCOUNTABLE SITE STATUS

* Stomach, Forestomach
[Ulcer TGLs = 6-19]

Ulcer

Mild

* Thymus

Atrophy

Marked

* Thyroid Gland

C Cell

Adenoma

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 614

TRT#: 7

SEX: Male

DAY ON TEST: 668

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62724

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|---|-------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Hypertrophy | Minimal |
| | [Hypertrophy TGLs = 3-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 1-16] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 614

TRT#: 7

SEX: Male

DAY ON TEST: 668

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62724

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 615

TRT#: 7

SEX: Male

DAY ON TEST: 645

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62725

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|---|---------------------------|---------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Hypertrophy | Minimal |
| | [Adenoma TGLs = 1-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Angiectasis | Minimal |
| | | Fatty Change | Minimal |
| | | Hypertrophy | Minimal |
| * Lung | Centrilobular, Hepatocyte | Infiltration Cellular | Histiocyte, Minimal |
| | Alveolus | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 2-19] | | |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 616

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62726

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|--------------------------|---------------------------------|-------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Clear Cell Focus TGLs = 5-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 3-5+6] | | |
| * Lymph Node, Mandibular | | Ectasia | Mild |
| | [Ectasia TGLs = 1-17] | | |
| * Nose | | Exudate | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 616

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62726

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|----------------|----------------------------------|----------|
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| | Follicular Cel | Hyperplasia | Minimal |
| | | Ultimobranchial Cyst | |

[Adenoma TGLs = 2-4]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 617

TRT#: 7

SEX: Male

DAY ON TEST: 703

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62727

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------|----------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| | Bilateral | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| | Atrium | Thrombosis | Marked |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 8-8+18] | | |
| * Liver | | Angiectasis | Mild |
| | | Degeneration | Cystic, Minimal |
| | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | [Angiectasis TGLs = 7-7] | | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 4-5+6] | | |
| * Nose | | Exudate | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 617

TRT#: 7

SEX: Male

DAY ON TEST: 703

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62727

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------|-------------------|----------------------------------|----------|
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Mild |
| * Skin | | Ulcer | Mild |
| [Ulcer TGLs = 1,5-16] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Moderate |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |
| | | Ultimobranchial Cyst | |
| [Adenoma TGLs = 3-4] | | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy
CONTRIBUTORY CAUSE OF DEATH - Heart Atrium Thrombosis

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 618

TRT#: 7

SEX: Male

DAY ON TEST: 467

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62728

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Keratoacanthoma | |

[Keratoacanthoma TGLs = 1-19]

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 619

TRT#: 7

SEX: Male

DAY ON TEST: 703

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62729

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|------------------------|--|----------------------------------|---------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 6-8] | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+20] | | |
| * Liver | | Cholangiofibrosis | Marked |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Cholangiofibrosis TGLs = 2-19] | | |
| | [Mixed Cell Focus TGLs = 3-18] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | | Ulcer | Moderate |
| | [Ulcer TGLs = 7-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 619

TRT#: 7

SEX: Male

DAY ON TEST: 703

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62729

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|--------|--------------|------|
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Adenoma | |
| [Adenoma TGLs = 5-4] | | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 620

TRT#: 7

SEX: Male

DAY ON TEST: 686

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62730

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 | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|------------------------|-------------------------------|---------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| | [Carcinoma TGLs = 4-16] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Mild |
| | Artery | Inflammation | Mild |
| | Acinus | Vacuolization Cytoplasmic | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Moderate |
| | | Ulcer | Mild |
| | [Ulcer TGLs = 5-19] | | |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 621

TRT#: 7

SEX: Male

DAY ON TEST: 688

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62731

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Pituitary Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

| | |
|-------------------------|----------|
| * Lymph Node, Bronchial | * Thymus |
|-------------------------|----------|

OBSERVATIONS

| | | | |
|---------------------|---------------------------------------|-------------------------------|-------------------|
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4,5-8+20] | | |
| * Liver | | Angiectasis | Minimal |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 3,9-5+6+18+19] | | |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 6-19] | | |
| Mesentery | Artery | Inflammation | Mild |
| | [Inflammation TGLs = 7-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Mild |
| * Parathyroid Gland | | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 621

TRT#: 7

SEX: Male

DAY ON TEST: 688

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62731

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|----------------|----------------------------------|---------|
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Mild |
| | Artery | Inflammation | Mild |
| * Thyroid Gland | C Cell | Adenoma | |
| [Adenoma TGLs = 8-4] | | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 622

TRT#: 7

SEX: Male

DAY ON TEST: 589

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62732

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Bronchial | * Mammary Gland | * Nose | * Parathyroid Gland |
| * Pituitary Gland | * Preputial Gland | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------------|---------------------------------------|----------------------|---------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 4-1+2] | Leukemia Mononuclear | |
| * Kidney | | Leukemia Mononuclear | |
| | | Nephropathy | Mild |
| * Liver | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 3-7] | | |
| * Lung | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 1-5+6] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mediastinal | | Leukemia Mononuclear | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| * Pancreas | Artery | Inflammation | Minimal |
| * Prostate | | Leukemia Mononuclear | |
| * Spleen | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 2-7] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | [Adenoma TGLs = 5-4] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 622

TRT#: 7

SEX: Male

DAY ON TEST: 589

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62732

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 623

TRT#: 7

SEX: Male

DAY ON TEST: 476

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62733

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * 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 | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|---------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| [Pheochromocytoma Benign | TGLs = 6-8] | | |
| * Epididymis | Artery | Inflammation | Mild |
| * Harderian Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Marked |
| [Nephropathy | TGLs = 4,5-8+18] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| [Hypertrophy | TGLs = 2,3-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion | TGLs = 1-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 624

TRT#: 7

SEX: Male

DAY ON TEST: 649

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62734

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|----------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 5,6-8+19] | | |
| * Liver | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 4-18] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | | Exudate | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 624

TRT#: 7

SEX: Male

DAY ON TEST: 649

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62734

ORGAN AND ACCOUNTABLE SITE STATUS

[Inflammation TGLs = 2,3-16]

| | | | |
|------------------------|------------|----------------------------------|-------------------------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Mild |
| | | Inflammation | Chronic Active, Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 625

TRT#: 7

SEX: Male

DAY ON TEST: 591

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62735

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Pancreas | * Parathyroid Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| | | Pheochromocytoma Benign | |
| * Eye | Cornea | Inflammation | Moderate |
| | [Inflammation TGLs = 3-13] | | |
| * Heart | | Cardiomyopathy | Minimal |
| | [Cardiomyopathy TGLs = 5-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 8-8+20] | | |
| * Liver | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 6-5+6+18] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 625

TRT#: 7

SEX: Male

DAY ON TEST: 591

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62735

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------------|----------------|----------------------------------|----------|
| [Inflammation TGLs = 7-19] | | | |
| Lymph Node | Renal | Congestion | Mild |
| [Congestion TGLs = 9-18] | | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Moderate |
| | Interstit Cell | Hyperplasia | Mild |
| | Artery | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 626

TRT#: 7

SEX: Male

DAY ON TEST: 612

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62736

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Spleen | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------------|---|-------------------------------|-------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| | Atrium | Thrombosis | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+22] | | |
| * Liver | | Hepatocellular Carcinoma | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Hepatocellular Carcinoma TGLs = 3-7] | | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 2-5+6+19+20+21] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 1-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Moderate |
| | | Ulcer | Moderate |
| | [Ulcer TGLs = 6-23] | | |
| * Testes | Artery | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 626

TRT#: 7

SEX: Male

DAY ON TEST: 612

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62736

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 627

TRT#: 7

SEX: Male

DAY ON TEST: 530

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62737

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|----------------------------|---------------------------|----------------|-----------------|
| * Heart | Atrium | Cardiomyopathy | Minimal |
| [Thrombosis TGLs = 3-15] | | Thrombosis | Marked |
| * Kidney | Centrilobular, Hepatocyte | Nephropathy | Marked |
| * Liver | | Necrosis | Moderate |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Marked |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| [Congestion TGLs = 2-4] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 628

TRT#: 7

SEX: Male

DAY ON TEST: 617

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62738

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|----------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Islets, Pancreatic | | Hyperplasia | Marked |
| * Kidney | | Nephropathy | Moderate |
| * Larynx | | Inflammation | Mild |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | [Hypertrophy TGLs = 1-7] | | |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Degeneration | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Minimal |
| * Thyroid Gland | C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 629

TRT#: 7

SEX: Male

DAY ON TEST: 561

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62739

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 630

TRT#: 7

SEX: Male

DAY ON TEST: 654

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62740

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+18] | | |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Clear Cell Focus TGLs = 2-7] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 630

TRT#: 7

SEX: Male

DAY ON TEST: 654

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62740

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 631

TRT#: 7

SEX: Male

DAY ON TEST: 482

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62741

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 | * Islets, Pancreatic | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

| | | |
|-------------------------|-----------------|---------------------|
| * Lymph Node, Bronchial | * Mammary Gland | * Parathyroid Gland |
|-------------------------|-----------------|---------------------|

OBSERVATIONS

| | | | |
|----------------------------|---------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Small, Jejunum | Artery | Inflammation | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4,5-8+19] | | |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Hypertrophy TGLs = 3-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | [Inflammation TGLs = 6-18] | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 632

TRT#: 7

SEX: Male

DAY ON TEST: 430

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62742

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Preputial Gland |
| * Prostate | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Necrosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| | | Necrosis | Moderate |
| * Brain | [Hyperplasia TGLs = 5-8] | Hypothalamus | Mild |
| | | Compression | Minimal |
| | | Hemorrhage | Minimal |
| | | Necrosis | Minimal |
| * Kidney | [Hemorrhage TGLs = 2-2] | Cerebrum | |
| | | Nephropathy | Marked |
| | | Thrombosis | Mild |
| * Liver | [Nephropathy TGLs = 4-8+18] | Fatty Change | Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 632

TRT#: 7

SEX: Male

DAY ON TEST: 430

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62742

ORGAN AND ACCOUNTABLE SITE STATUS

* Salivary Glands

Atrophy

Focal, Mild

* Thymus

Atrophy

Marked

* Thyroid Gland

C Cell

Hyperplasia

Minimal

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 633

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62743

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Pancreas | * Parathyroid Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

| | |
|-------------------------|-----------------|
| * Lymph Node, Bronchial | * Mammary Gland |
|-------------------------|-----------------|

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | | Angiectasis | Minimal |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 2,3-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Pituitary Gland | Pars Intermed | Adenoma | |
| | Pars Distalis | Hyperplasia | Mild |
| | [Adenoma TGLs = 1-10] | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 633

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62743

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Mild

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 634

TRT#: 7

SEX: Male

DAY ON TEST: 614

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62744

ORGAN AND ACCOUNTABLE SITE STATUS

* Testes

Artery

Inflammation

Minimal

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 635

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62745

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|---------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Heart | | Pheochromocytoma Benign | |
| * Kidney | | Cardiomyopathy | Minimal |
| | | Cyst | |
| | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 5-18] | | |
| * Liver | | Fatty Change | Mild |
| | | Centrilobular, Hepatocyte | |
| | [Hypertrophy TGLs = 3-7] | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Pancreas | | Hyperplasia | Marked |
| | | Artery | |
| | [Hyperplasia TGLs = 4-16] | | |
| * Skin | | Keratoacanthoma | |
| | | Squamous Cell Papilloma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 635

TRT#: 7

SEX: Male

DAY ON TEST: 730

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62745

ORGAN AND ACCOUNTABLE SITE STATUS

[Keratoacanthoma TGLs = 1-19]

[Squamous Cell Papilloma TGLs = 6-20]

| | | | |
|-----------------|--------|--------------|----------|
| * Testes | Artery | Inflammation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 636

TRT#: 7

SEX: Male

DAY ON TEST: 575

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62746

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|-------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| | [Cardiomyopathy TGLs = 1-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+19] | | |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 2-5+6+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Minimal |
| | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 636

TRT#: 7

SEX: Male

DAY ON TEST: 575

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62746

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 637

TRT#: 7

SEX: Male

DAY ON TEST: 421

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62747

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|---------------------------|-------------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2-8+18] | | |
| * Liver | | Bile Duct | Hyperplasia |
| | | Centrilobular, Hepatocyte | Hypertrophy |
| | | Hepatocyte | Necrosis |
| | [Hypertrophy TGLs = 1-7] | | |
| * Lung | | Alveolus | Infiltration Cellular |
| | | | Inflammation |
| * Nose | | Olfactory Epi | Accumulation, Hyaline Droplet |
| * Pancreas | | Acinus | Atrophy |
| | | Artery | Inflammation |
| * Seminal Vesicle | | | Inflammation |
| * Testes | | Artery | Inflammation |
| * Thymus | | | Atrophy |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 638

TRT#: 7

SEX: Male

DAY ON TEST: 621

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62748

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pituitary Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | | |
|-------------------------|-----------------|---------------------|
| * Lymph Node, Bronchial | * Mammary Gland | * Parathyroid Gland |
|-------------------------|-----------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| | | Sarcoma | |
| | [Sarcoma TGLs = 2-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Exudate | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| | Artery | Inflammation | Mild |
| * Preputial Gland | | Inflammation | Minimal |
| * Skin | | Ulcer | Moderate |
| | [Ulcer TGLs = 5-20] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 638

TRT#: 7

SEX: Male

DAY ON TEST: 621

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62748

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|----------------|--------------|----------|
| * Testes | Interstit Cell | Hyperplasia | Mild |
| | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 639

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62749

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 2-8+19] | | |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Germinal Epith | Atrophy | Moderate |
| | Artery | Inflammation | Moderate |
| * Thymus | | Atrophy | Marked |
| | | Cyst | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 639

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62749

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Minimal

[Adenoma TGLs = 3-4]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 640

TRT#: 7

SEX: Male

DAY ON TEST: 549

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62750

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|--------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Cerebrum | Necrosis | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8+19] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Alveolar/Bronchiolar Carcinoma | |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Alveolar/Bronchiolar Carcinoma TGLs = 2-6+18] | | |
| | [Inflammation TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Marked |
| | Artery | Inflammation | Mild |
| * Skin | | Keratoacanthoma | |
| | [Keratoacanthoma TGLs = 1-21] | | |
| * Testes | Artery | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 640

TRT#: 7

SEX: Male

DAY ON TEST: 549

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62750

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 641

TRT#: 7

SEX: Male

DAY ON TEST: 654

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62751

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Thrombosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3-8+19] | | |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| | [Adenoma TGLs = 2-10] | | |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 642

TRT#: 7

SEX: Male

DAY ON TEST: 549

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62752

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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Testes | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------|---------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2,3-8+18] | | |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | Acinus | Hyperplasia | Marked |
| * Stomach, Glandular | | Mineralization | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 643

TRT#: 7

SEX: Male

DAY ON TEST: 492

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62753

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Preputial Gland | * Prostate | * Salivary Glands | * Seminal Vesicle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|---------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8+18] | | |
| * Liver | | Fatty Change | Moderate |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 644

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62754

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|----------------------------|--------------------------|---------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|-------------------------------|---------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Intestine Small, Ileum | | Cyst | Mild |
| [Cyst TGLs = 3-18] | | | |
| * Kidney | | Nephropathy | Moderate |
| [Nephropathy TGLs = 1-8+18] | | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | | Exudate | Minimal |
| * Parathyroid Gland | | Adenoma | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 2-10] | | | |
| * Preputial Gland | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 644

TRT#: 7

SEX: Male

DAY ON TEST: 729

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62754

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 645

TRT#: 7

SEX: Male

DAY ON TEST: 575

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62755

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------|--|-------------------------------|-------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 5-8+18] | | |
| * Liver | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Mild |
| | | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 2,3,4-5+6] | | |
| * Nose | | Accumulation, Hyaline Droplet | Minimal |
| * Parathyroid Gland | | Adenoma | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Hyperplasia | Minimal |
| | C Cell | | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 646

TRT#: 7

SEX: Male

DAY ON TEST: 648

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62756

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|-------------------------|----------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 2-5+6] | | |
| * Nose | Nasopharyn Dct | Inflammation | Suppurative, Minimal |
| * Pancreas | Acinus | Adenoma | |
| | [Adenoma TGLs = 3-7] | | |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 647

TRT#: 7

SEX: Male

DAY ON TEST: 571

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62757

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Epididymis | * Esophagus | * Eye | * 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 | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------------|------------------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| | [Pheochromocytoma Malignant TGLs = 7-8] | | |
| * Harderian Gland | | Pheochromocytoma Malignant | Metastatic (Adrenal Medulla) |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Cyst | |
| | [Nephropathy TGLs = 5,6-8+18] | Nephropathy | Marked |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Preputial Gland | | Cyst | Mild |
| | [Cyst TGLs = 1-16] | | |
| * Prostate | | Inflammation | Mild |
| | [Inflammation TGLs = 3-17] | | |
| * Seminal Vesicle | | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 647

TRT#: 7

SEX: Male

DAY ON TEST: 571

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62757

ORGAN AND ACCOUNTABLE SITE STATUS

* Urinary Bladder

Ulcer

Mild

[Ulcer TGLs = 2-19]

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 648

TRT#: 7

SEX: Male

DAY ON TEST: 96

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62758

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Salivary Glands | * Seminal Vesicle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|----------------------------|-----------------------|---------------------|
| * Harderian Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Hypertrophy TGLs = 1-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |

PRIMARY CAUSE OF DEATH - UNCERTAIN

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 649

TRT#: 7

SEX: Male

DAY ON TEST: 709

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62759

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pituitary Gland | * Preputial Gland | * Prostate | * Salivary Glands |
| * Seminal Vesicle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------|---------------------------------|----------------------------------|----------------------------|
| * Adrenal Cortex | | Necrosis | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 3,4-8+18] | | |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Fatty Change | Mild |
| | Bile Duct | Hyperplasia | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Degeneration | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |
| * Parathyroid Gland | | Carcinoma | Metastatic (Thyroid Gland) |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Testes | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Carcinoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 649

TRT#: 7

SEX: Male

DAY ON TEST: 709

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62759

ORGAN AND ACCOUNTABLE SITE STATUS

[Carcinoma TGLs = 2-4]

C Cell

Hyperplasia

Mild

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 650

TRT#: 7

SEX: Male

DAY ON TEST: 568

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62760

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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Seminal Vesicle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Testes | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|---------------------------|--------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| | [Cardiomyopathy TGLs = 2-15] | | |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 5-8+19] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Hypertrophy TGLs = 4-7] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Moderate |
| | | Congestion | Mild |
| * Lymph Node, Mediastinal | | | |
| | [Congestion TGLs = 3-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 101

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62661

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | Inflammation | Chronic, Mild |
| * Mammary Gland | | Adenoma | |
| | | Fibroadenoma | |
| | [Adenoma TGLs = 2-17] | | |
| | [Fibroadenoma TGLs = 1-18+19+20+21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 102

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62662

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | Vagina | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|-----------------------------------|----------------------------------|------------------|
| * Brain | Hypothalamus | Compression | Mild |
| * Harderian Gland | | Atrophy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Hepatocellular Adenoma | |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62663

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| * Harderian Gland | | Inflammation | Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | | Nephropathy | Mild |
| | [Adenoma TGLs = 5-16] | | |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18+19+20+21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | Minimal |
| | [Cyst TGLs = 3-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62663

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 4-17]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 104

TRT#: 2

SEX: Female

DAY ON TEST: 556

DOSE: Control

DISP: Natural Death

HISTO: 62664

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|---------------------------|---------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 3-8] | | |
| * Lung | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 1-16] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 105

TRT#: 2

SEX: Female

DAY ON TEST: 373

DOSE: Control

DISP: Natural Death

HISTO: 62665

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 | * Lung |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

Vagina

OBSERVATIONS

| | | | |
|-----------------|--------|----------------------------------|---------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Minimal |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| | | Ultimobranchial Cyst | |
| * Uterus | | Dilatation | Marked |
| | | Hemorrhage | Marked |

[Dilatation TGLs = 1-10]

PRIMARY CAUSE OF DEATH - Uterus Hemorrhage

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 106

TRT#: 2

SEX: Female

DAY ON TEST: 599

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62666

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | Peripheral Nerve | * Salivary Glands | Skeletal Muscle |
| * Skin | Spinal Cord | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Brain | Hypothalamus | Compression | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Eosinophilic Focus | |
| | [Eosinophilic Focus TGLs = 4-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 729

DOSE: Control

DISP: Natural Death

HISTO: 62667

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|-------------------|--------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| | | Necrosis | Minimal |
| | | Thrombosis | Marked |
| | [Thrombosis TGLs = 4-8] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Adenoma | |
| | [Adenoma TGLs = 1-9] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | Mild |
| | | Inflammation | Minimal |
| | [Cyst TGLs = 5,6-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | | Angiectasis | Mild |
| | Pars Intermed | Hyperplasia | Marked |
| | [Hyperplasia TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 107

TRT#: 2

SEX: Female

DAY ON TEST: 729

DOSE: Control

DISP: Natural Death

HISTO: 62667

ORGAN AND ACCOUNTABLE SITE STATUS

[Hematopoietic Cell Proliferation TGLs = 3-7]

* Thymus

Atrophy

Marked

* Uterus

Squamous Cell Carcinoma

[Squamous Cell Carcinoma TGLs = 7,8,9,10-16+17+18+19]

PRIMARY CAUSE OF DEATH - Uterus Squamous Cell Carcinoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 108

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62668

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Clear Cell Focus TGLs = 3-7] | | |
| | [Eosinophilic Focus TGLs = 4-16] | | |
| * Lung | Alveolar Epith | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |
| | | Polyp Stromal | |
| | [Hyperplasia TGLs = 2,5-10+16] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 109

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62669

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | | Granulosa Cell Tumor Benign | |
| | Mesothelium | Hyperplasia | Minimal |
| | Artery | Inflammation | Mild |
| | [Cyst TGLs = 2-9] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 110

TRT#: 2

SEX: Female

DAY ON TEST: 664

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62670

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 |
| * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | Hypothalamus | Compression | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 1-10] | | |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 111

TRT#: 2

SEX: Female

DAY ON TEST: 311

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62671

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 | * Liver |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * 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 | Vagina | |

OBSERVATIONS

| | | | |
|------------------------------------|-------------|---------------------------------------|---|
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Minimal Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-16+17+18] | | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 112

TRT#: 2

SEX: Female

DAY ON TEST: 534

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62672

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 | * Liver |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-----------------|--|---------------------------------------|---|
| * Kidney | | Nephropathy | Mild |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Minimal Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 113

TRT#: 2

SEX: Female

DAY ON TEST: 646

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62673

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-----------------|--|-------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fibrosis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | | Pigmentation | Minimal |
| | [Fibrosis TGLs = 3-19] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| | Lymph Node | Congestion | Mild |
| | [Congestion TGLs = 4-19] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Polyp Stromal | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 114

TRT#: 2

SEX: Female

DAY ON TEST: 534

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62674

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|------------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Cystic, Mild |
| | [Fibroadenoma TGLs = 1-18+19+20] | | |
| | [Hyperplasia TGLs = 2,3-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Moderate |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 115

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62675

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

| | |
|-------------------------|--------|
| * Lymph Node, Bronchial | Vagina |
|-------------------------|--------|

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Hypertrophy | Minimal |
| | | Necrosis | Minimal |
| | | Thrombosis | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Cyst | Multiple |
| | Bile Duct | Hyperplasia | Minimal |
| | [Cyst TGLs = 1,2-7+17] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 115

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62675

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Metaplasia

Squamous, Marked

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 116

TRT#: 2

SEX: Female

DAY ON TEST: 584

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62676

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * Adrenal Cortex | 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------|---------------|----------------------------------|--------------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Cyst | |
| [Cyst TGLs = 4-8] | | | |
| * Larynx | Squam Epithel | Hyperplasia | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| | Hepatocyte | Necrosis | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Bacterium | |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic Active, Moderate |
| [Inflammation TGLs = 2-16] | | | |

PRIMARY CAUSE OF DEATH - Uterus Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 117

TRT#: 2

SEX: Female

DAY ON TEST: 536

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62677

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|------------------|----------------------------|-------------------------------|---------------------|
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Skin | | Ulcer | Mild |
| | [Ulcer TGLs = 1,2-16+17] | | |
| * Thymus | | Atrophy | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - UNCERTAIN

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 118

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62678

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

| | |
|-------------------|--------------------------|
| * Adrenal Medulla | * Lymph Node, Mandibular |
|-------------------|--------------------------|

OBSERVATIONS

| | | | |
|-------------------|---------------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Clitoral Gland | | Cyst | Mild |
| | | Inflammation | Minimal |
| | [Cyst TGLs = 1-9] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Cholangiofibrosis | Moderate |
| | | Cyst | Mild |
| | [Cyst TGLs = 4-17] | | |
| * Lung | | Hyperplasia | Minimal |
| | Alveolar Epith | Infiltration Cellular | Histiocyte, Minimal |
| | Alveolus | Metaplasia | Osseous, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-18+19+20+21] | | |
| * Nose | | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | | Hyperplasia | Mild |
| | Pars Distalis | | |
| | [Hyperplasia TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 118

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62678

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 119

TRT#: 2

SEX: Female

DAY ON TEST: 591

DOSE: Control

DISP: Natural Death

HISTO: 62679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|------------------------------|-------------------------------|------------------|
| * Brain | Hypothalamus | Compression | Moderate |
| * Eye | Cornea | Inflammation | Minimal |
| | [Inflammation TGLs = 1-13] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| Skeletal Muscle | | Hemorrhage | Mild |
| | [Hemorrhage TGLs = 3-16] | | |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 120

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62680

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Brain | | Glioma Malignant | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Adenoma | |
| | [Adenoma TGLs = 4-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Thecoma Benign | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Salivary Glands | Parotid GI | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 120

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62680

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 121

TRT#: 2

SEX: Female

DAY ON TEST: 484

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62681

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hematopoietic Cell Proliferation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| | [Hematopoietic Cell Proliferation TGLs = 3-7] | | |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| Vagina | | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 2-16] | | |

PRIMARY CAUSE OF DEATH - Vagina Schwannoma Malignant

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 122

TRT#: 2

SEX: Female

DAY ON TEST: 311

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62682

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 | * Kidney | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-----------------|---------------------------------|-------------------------------|---------------------|
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 123

TRT#: 2

SEX: Female

DAY ON TEST: 696

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lung | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--------------------------|---------------------------------------|----------------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Inflammation | Mild |
| | Pelvis | Inflammation | Chronic Active, Moderate |
| | Interstitialium | Inflammation | Chronic Active, Moderate |
| | | Nephropathy | Minimal |
| | [Inflammation TGLs = 3,4-8+16] | | |
| * Lymph Node, Mesenteric | | Congestion | Mild |
| | [Congestion TGLs = 5-21] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17+18+19+20] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Mild |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Kidney Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 124

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62684

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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 | * Lung | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--|---------------|----------------------------------|--------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Hypertrophy | Moderate |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| [Cyst TGLs = 2-7] | | | |
| Lymph Node | Lumbar | Congestion | Mild |
| [Congestion TGLs = 3-16] | | | |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-17+18+19+20+21] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| | | Cyst | Mild |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 125

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62685

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 3-8] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 126

TRT#: 2

SEX: Female

DAY ON TEST: 459

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62686

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|------------------------------|---------------|----------------------------------|--------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Adenoma | |
| [Adenoma TGLs = 2-16] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | | Inflammation | Chronic Active, Moderate |
| [Inflammation TGLs = 3-10] | | | |

PRIMARY CAUSE OF DEATH - Uterus Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 127

TRT#: 2

SEX: Female

DAY ON TEST: 710

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62687

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--|---------------|-----------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Brain | Hypothalamus | Compression | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Carcinoma | |
| [Carcinoma TGLs = 6-7] | | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 4-5+6] | | | |
| * Mammary Gland | | Adenocarcinoma | |
| [Adenocarcinoma TGLs = 3-16+17] | | | |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 5-10] | | | |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 127

TRT#: 2

SEX: Female

DAY ON TEST: 710

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62687

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus
Vagina

Endometrium

Hyperplasia
Hyperplasia

Cystic, Mild
Gran Cell, Moderate

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

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 128

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62688

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|----------------------------------|---------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| [Cyst TGLs = 1-9] | | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| [Mixed Cell Focus TGLs = 2-16] | | | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 3-17+18] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| | | Ultimobranchial Cyst | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 129

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62689

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Necrosis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Mixed Cell Focus | |
| [Mixed Cell Focus TGLs = 1-7] | | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| [Infiltration Cellular TGLs = 3,4-5+17] | | | |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 6-20] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Granulosa Cell Tumor Benign | |
| [Granulosa Cell Tumor Benign TGLs = 7-18+19] | | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| [Hyperplasia TGLs = 5-10] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 129

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62689

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 130

TRT#: 2

SEX: Female

DAY ON TEST: 590

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62690

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|---------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Inflammation | Suppurative, Marked |
| | | Polyp Stromal | |
| | | Prolapse | |

[Inflammation TGLs = 1-16]

PRIMARY CAUSE OF DEATH - Uterus Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 131

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62691

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|---------------|----------------------------------|---------------------|
| * Clitoral Gland | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 132

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62692

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|-----------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| | | Thrombosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | [Clear Cell Focus TGLs = 2-16] | | |
| | [Eosinophilic Focus TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 1-10] | | |
| * Salivary Glands | | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |
| | [Polyp Stromal TGLs = 3-16] | | |
| Vagina | | Granular Cell Tumor Benign | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 133

TRT#: 2

SEX: Female

DAY ON TEST: 528

DOSE: Control

DISP: Natural Death

HISTO: 62693

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * 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 |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|--------------------------|--|-------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Moderate |
| * Harderian Gland | | Atrophy | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 2-9] | | |
| * Mammary Gland | | Hyperplasia | Cystic, Marked |
| | [Hyperplasia TGLs = 1,3,4-16+17+18+19+20+21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 134

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62694

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 4-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |
| | [Hyperplasia TGLs = 3-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 135

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62695

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |
| | | Polyp Stromal | |

[Polyp Stromal TGLs = 1-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 136

TRT#: 2

SEX: Female

DAY ON TEST: 450

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62696

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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------|---|-------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Larynx | Squam Epithel | Hyperplasia | Minimal |
| * Liver | | Hepatodiaphragmatic Nodule | |
| | [Hepatodiaphragmatic Nodule TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Skin | | Ulcer | Mild |
| | [Ulcer TGLs = 5-19] | | |
| * Thymus | | Atrophy | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 137

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62697

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--------------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | | Adenocarcinoma | |
| | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 137

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62697

ORGAN AND ACCOUNTABLE SITE STATUS

Metaplasia

Squamous, Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 138

TRT#: 2

SEX: Female

DAY ON TEST: 534

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62698

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 | * Kidney | * Larynx |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------|---|----------------------------------|---------------------|
| * Liver | | Fatty Change | Minimal |
| | | Hematopoietic Cell Proliferation | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Basal Cell Carcinoma | Metastatic (Skin) |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Mild |
| * Skin | | Basal Cell Carcinoma | |
| | [Basal Cell Carcinoma TGLs = 1-16+17] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Moderate |
| | [Hematopoietic Cell Proliferation TGLs = 2-7] | | |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Skin Basal Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 139

TRT#: 2

SEX: Female

DAY ON TEST: 303

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62699

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * Adrenal Cortex | 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, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--------------------------|---|----------------------------------|-------------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| | Bile Duct | Hepatodiaphragmatic Nodule | |
| | | Hyperplasia | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| | [Hepatodiaphragmatic Nodule TGLs = 2-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Moderate |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Moderate |
| * Thymus | | Atrophy | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 140

TRT#: 2

SEX: Female

DAY ON TEST: 559

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62700

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Brain | Cranial Nerve | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 7-2] | | |
| * Kidney | | Nephropathy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| | Sinus | Polyp, Inflammatory | Moderate |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 4-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Mild |
| | [Adenoma TGLs = 6-10] | | |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Marked |

PRIMARY CAUSE OF DEATH - Brain Cranial Nerve Schwannoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 141

TRT#: 2

SEX: Female

DAY ON TEST: 646

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62701

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 5-7] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | | Fibroadenoma | |
| | [Adenocarcinoma TGLs = 1-16+17] | | |
| | [Fibroadenoma TGLs = 2-18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Granulosa Cell Tumor Benign | |
| | [Granulosa Cell Tumor Benign TGLs = 3-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 142

TRT#: 2

SEX: Female

DAY ON TEST: 536

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62702

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|------------------|----------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Cyst | |
| | | Fatty Change | Minimal |
| | [Cyst TGLs = 3-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Skin | | Ulcer | Mild |
| | [Ulcer TGLs = 1,2-16+17] | | |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | | Ultimobranchial Cyst | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 143

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62703

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Liver |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|---------------------------------------|---------------|----------------------------------|---------------------|
| * Clitoral Gland | | Inflammation | Mild |
| [Inflammation TGLs = 1-9] | | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 2-18+19+20+21] | | | |
| * Ovary | | Cyst | Mild |
| [Cyst TGLs = 4-9] | | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| Skeletal Muscle | | Liposarcoma | |
| [Liposarcoma TGLs = 3-17] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 144

TRT#: 2

SEX: Female

DAY ON TEST: 534

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62704

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * 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 | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

| | |
|-------------|-------------------------|
| * Esophagus | * Lymph Node, Bronchial |
|-------------|-------------------------|

OBSERVATIONS

| | | | |
|---------------------------------|---------------|----------------------------------|-----------------|
| * Kidney | | Nephropathy | Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-17+18] | | | |
| Mesentery | Fat | Necrosis | Minimal |
| [Necrosis TGLs = 2-16] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Minimal |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | Cervix | Hypertrophy | Stromal, Marked |
| | | Metaplasia | Squamous, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 145

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62705

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|----------------------|---|-------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| | [Adenoma TGLs = 5-7] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Cyst | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Note: Cyst of liver is located on sample taken for morphology of frozen section | | |
| | [Eosinophilic Focus TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Mild |
| | | Fibrosis | Minimal |
| | [Cyst TGLs = 6-9] | | |
| * Pancreas | Acinus | Atrophy | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 145

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62705

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|-------------|----------------|
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 146

TRT#: 2

SEX: Female

DAY ON TEST: 674

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62706

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Angiectasis | Minimal |
| | | Degeneration | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| | | Inflammation | Minimal |
| | [Cyst TGLs = 3-9] | | |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2,4-16+17+18+19+20+21+22+23+24] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 146

TRT#: 2

SEX: Female

DAY ON TEST: 674

DOSE: Control

DISP: Moribund Sacrifice

HISTO: 62706

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 147

TRT#: 2

SEX: Female

DAY ON TEST: 540

DOSE: Control

DISP: Natural Death

HISTO: 62707

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

Vagina

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

[Hyperplasia TGLs = 1-16]

PRIMARY CAUSE OF DEATH - Uterus Endometrium Hyperplasia

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 148

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62708

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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 | * Lung | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--------------------------|---------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Hepatocellular Adenoma | |
| | Bile Duct | Hyperplasia | Minimal |
| [Hepatocellular Adenoma | TGLs = 1-16] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Uterus | | Adenomyosis | Minimal |
| | Endometrium | Hyperplasia | Cystic, Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 149

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62709

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|-----------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Thrombosis | Marked |
| | [Thrombosis TGLs = 1-8] | | |
| * Clitoral Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | Bile Duct | Cyst | Multiple |
| | [Cyst TGLs = 2-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 3-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Cervix | Cyst | Squamous, Multiple |
| | Endometrium | Hyperplasia | Cystic, Minimal |
| | | Metaplasia | Squamous, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 150

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62710

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|----------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Moderate |
| | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Mild |
| | [Degeneration TGLs = 3-8] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Clear Cell Focus TGLs = 2-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Squamous, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Glandular | | Ectopic Tissue | Mild |

Note: Glandular stomach has pancreatic tissue in wall of the stomach. No choice of terminology in nonneoplastic menu seems appropriate (sugg: developmental anomaly)

Note: Ectopic tissue is exocrine pancreas.

[Ectopic Tissue TGLs = 4-10]

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 150

TRT#: 2

SEX: Female

DAY ON TEST: 731

DOSE: Control

DISP: Terminal Sacrifice

HISTO: 62710

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Uterus

Endometrium

Hyperplasia

Cystic, Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 301

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62961

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 302

TRT#: 4

SEX: Female

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62962

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * 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 | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1,2-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Cervix | Cyst | Squamous |
| | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 303

TRT#: 4

SEX: Female

DAY ON TEST: 534

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62963

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Angiectasis | Minimal |
| | [Angiectasis TGLs = 3,4-16] | Clear Cell Focus | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17+18+19+20+21+22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |
| | [Hyperplasia TGLs = 2-10] | | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 304

TRT#: 4

SEX: Female

DAY ON TEST: 646

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62964

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | Vagina | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18+19+20+21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | | Angiectasis | Minimal |
| | [Angiectasis TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 305

TRT#: 4

SEX: Female

DAY ON TEST: 612

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62965

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------|--|-------------------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Cystic, Mild |
| | [Fibroadenoma TGLs = 1-16] | | |
| | [Hyperplasia TGLs = 2-9] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | | Ultimobranchial Cyst | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 306

TRT#: 4

SEX: Female

DAY ON TEST: 618

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62966

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|--|---------------------------------------|--------------------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Mild Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma Hyperplasia | Cystic, Marked |
| | [Fibroadenoma TGLs = 2-17+18+19] | | |
| | [Hyperplasia TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 307

TRT#: 4

SEX: Female

DAY ON TEST: 691

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62967

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * 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 | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--------------------------------|-------------------------|-------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Brain | Hypothalamus | Compression | Marked |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 13-8+16] | | |
| * Liver | Bile Duct | Cyst | |
| | [Cyst TGLs = 10,11-7] | | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | | Metaplasia | Squamous, Minimal |
| | [Inflammation TGLs = 4-5+6] | | |
| Lymph Node | Renal | Ectasia | Mild |
| | Pancreatic | Hyperplasia | Mild |
| | Iliac | Hyperplasia | Mild |
| | [Ectasia TGLs = 14-22] | | |
| | [Hyperplasia TGLs = 9-7] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 307

TRT#: 4

SEX: Female

DAY ON TEST: 691

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62967

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|--|----------------------------------|--------------------|
| | [Hyperplasia TGLs = 12-21] | | |
| * Mammary Gland | | Adenocarcinoma Hyperplasia | Cystic, Mild |
| | [Adenocarcinoma TGLs = 7-20] | | |
| | [Hyperplasia TGLs = 2,6,15-18+19+23] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Skin | Subcut Tiss | Lipoma | |
| | [Lipoma TGLs = 1-17] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Hyperplasia | Lymphoid, Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| | Follicular Cel | Hyperplasia | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | | Polyp Stromal | |
| | [Polyp Stromal TGLs = 8-10] | | |

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

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 308

TRT#: 4

SEX: Female

DAY ON TEST: 534

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62968

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 | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-----------------|------------------------------------|----------------------------------|---------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 309

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62969

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------------------|---------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Mild |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| [Inflammation TGLs = 1-5+6] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| [Hyperplasia TGLs = 2-10] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 310

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62970

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 | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|--|---|
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Minimal Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1-16] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Adenocarcinoma Hyperplasia Polyp Stromal | Cystic, Mild |
| | [Polyp Stromal TGLs = 2-10] | | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 311

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62971

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|---------------------------|--------------------------|-------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Heart |
| * Intestine Small, Ileum | * Islets, Pancreatic | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-----------------------------|--|-----------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Intestine Large, Cecum | Artery | Inflammation | Mild |
| * Intestine Large, Colon | Artery | Inflammation | Mild |
| * Intestine Large, Rectum | Artery | Inflammation | Mild |
| * Intestine Small, Duodenum | Artery | Inflammation | Mild |
| * Intestine Small, Jejunum | Artery | Inflammation | Mild |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 3-8] | | |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Eosinophilic Focus TGLs = 2-7] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Degeneration | Minimal |
| * Ovary | Artery | Inflammation | Moderate |
| * Pancreas | Artery | Inflammation | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 311

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62971

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|----------------------------------|---------|
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| | | Thymoma Benign | |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| Vagina | | Granular Cell Tumor Benign | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 312

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62972

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 | * Larynx |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|----------------------|---|----------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Moderate |
| | | Degeneration | Cystic, Mild |
| | [Degeneration TGLs = 4-8] | | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Angiectasis | Minimal |
| | [Angiectasis TGLs = 3-7] | | |
| | [Eosinophilic Focus TGLs = 2-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 10-5+6] | | |
| * Mammary Gland | | Adenocarcinoma | Multiple |
| | | Fibroadenoma | Multiple |
| | [Adenocarcinoma TGLs = 6,7,8-17+18+19+20] | | |
| | [Fibroadenoma TGLs = 9,11-16+21] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 312

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62972

ORGAN AND ACCOUNTABLE SITE STATUS

[Polyp Stromal TGLs = 1-10]

Polyp Stromal

Multiple

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 313

TRT#: 4

SEX: Female

DAY ON TEST: 612

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62973

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-----------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Eosinophilic Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-16+17+18] | | |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 4-9] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 314

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62974

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Angiectasis | Moderate |
| | [Angiectasis TGLs = 4-7] | | |
| * Lung | | Cystic Keratinizing Epithelioma | |
| | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | Note: Adenoma, bronchus = cornifying epithelioma | | |
| | [Inflammation TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,6-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Pancreas | Acinus | Atrophy | Mild |
| | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 314

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62974

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|----------------------------|-------------|-------------|------------------|
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| [Adenoma TGLs = 2-4] | | | |
| * Uterus | Cervix | Hyperplasia | Squamous, Marked |
| | Endometrium | Hyperplasia | Cystic, Mild |
| | | Metaplasia | Squamous, Marked |
| [Metaplasia TGLs = 5-10] | | | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 315

TRT#: 4

SEX: Female

DAY ON TEST: 708

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62975

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * 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 | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Brain | Hypothalamus | Compression | Marked |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | Lymphatic, Pericardium | Inflammation | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Fibrosis | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Adenoma | |
| | [Adenoma TGLs = 3-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 316

TRT#: 4

SEX: Female

DAY ON TEST: 652

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62976

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 |
| * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Eye | Cornea | Inflammation | Moderate |
| | [Inflammation TGLs = 3-13] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 5-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| Zymbal's Gland | | Carcinoma | |
| | [Carcinoma TGLs = 1-18] | | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Zymbal's Gland Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 317

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62977

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Clitoral Gland | | Pheochromocytoma Benign | |
| | | Cyst | Mild |
| | | Inflammation | Mild |
| | [Cyst TGLs = 3-17] | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Cholangiocarcinoma | |
| | Bile Duct | Cyst | |
| | | Fibrosis | Minimal |
| | | Hepatodiaphragmatic Nodule | |
| | [Cholangiocarcinoma TGLs = 6-7] | | |
| | [Cyst TGLs = 7-7] | | |
| | [Hepatodiaphragmatic Nodule TGLs = 8-16] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 9-5+6] | | |
| * Mammary Gland | | Adenoma | |
| | | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 317

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62977

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------------|---------------|----------------------------|------------------|
| [Adenoma TGLs = 2-19] | | | |
| [Hyperplasia TGLs = 1-18] | | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |
| [Hyperplasia TGLs = 4,5-10] | | | |
| Vagina | | Granular Cell Tumor Benign | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 318

TRT#: 4

SEX: Female

DAY ON TEST: 463

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62978

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Clitoral Gland | * Esophagus | * Eye | * Harderian Gland |
| * Heart | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Larynx | * Liver | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | Spinal Cord | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|----------------------------------|-------------------------------|-------------------------|
| Blood Vessel | Aorta | Inflammation | Mild |
| * Brain | Unilateral | Inflammation | Granulomatous, Mild |
| | Unilateral | Necrosis | Mild |
| * Intestine Large, Cecum | | Inflammation | Mild |
| * Intestine Large, Colon | | Inflammation | Mild |
| * Intestine Large, Rectum | | Inflammation | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Moderate |
| | [Inflammation TGLs = 3-16] | | |
| * Spleen | | Inflammation | Moderate |
| | [Inflammation TGLs = 4,5-7+16] | | |
| * Stomach, Forestomach | | Inflammation | Chronic Active, Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Inflammation | Chronic Active, Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | [Hyperplasia TGLs = 2-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 318

TRT#: 4

SEX: Female

DAY ON TEST: 463

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62978

ORGAN AND ACCOUNTABLE SITE STATUS

Vagina

Artery

Inflammation

Chronic Active, Moderate

PRIMARY CAUSE OF DEATH

- Brain Unilateral Necrosis

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 319

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62979

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose | * Ovary |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|------------------------------|-------------|----------------------------------|--------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| [Cyst TGLs = 3-7] | | | |
| * Mammary Gland | | Fibroadenoma | |
| | | Hyperplasia | Cystic, Mild |
| [Fibroadenoma TGLs = 2-17] | | | |
| [Hyperplasia TGLs = 1-16] | | | |
| * Pancreas | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |
| [Hyperplasia TGLs = 4-10] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 320

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62980

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|----------------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Cyst | |
| | | Nephropathy | Mild |
| | [Cyst TGLs = 5-17] | | |
| * Liver | | Angiectasis | Minimal |
| | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Angiectasis TGLs = 3-16] | | |
| | [Cyst TGLs = 4-7] | | |
| * Lung | | Carcinoma | Metastatic (Thyroid Gland) |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Pancreas | Acinus | Atrophy | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thyroid Gland | C Cell | Carcinoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 320

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62980

ORGAN AND ACCOUNTABLE SITE STATUS

[Carcinoma TGLs = 1-4]

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 321

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62981

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * 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 | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | * Uterus | Vagina | |

MISSING

* Parathyroid Gland * Thymus

OBSERVATIONS

| | | | |
|---|-----------|----------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Malignant | |
| [Pheochromocytoma Malignant TGLs = 1-16] | | | |
| * Brain | | Glioma Malignant | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Moderate |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| [Basophilic Focus TGLs = 4-7] | | | |
| [Cyst TGLs = 6-7] | | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| [Infiltration Cellular TGLs = 2-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 5-17] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 321

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62981

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------------------|---------------|-------------|----------|
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Moderate |
| [Hyperplasia TGLs = 3-10] | | | |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 322

TRT#: 4

SEX: Female

DAY ON TEST: 643

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62982

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| Peripheral Nerve | * Salivary Glands | Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Moderate |
| * Clitoral Gland | | Cyst | Mild |
| | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | Bile Duct | Cyst | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 3-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| Spinal Cord | | Cyst Epithelial Inclusion | Minimal |
| | Axon, Nerve | Degeneration | Mild |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 322

TRT#: 4

SEX: Female

DAY ON TEST: 643

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62982

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia
Polyp Stromal

Cystic, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 323

TRT#: 4

SEX: Female

DAY ON TEST: 646

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62983

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|--------------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrous Histiocytoma | Metastatic (Skin) |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 4-6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-17+18] | | |
| * Nose | | Foreign Body | Minimal |
| * Skin | Subcut Tiss | Fibrous Histiocytoma | |
| | Note: TGLS 1 - No Correlating Lesion | | |
| | [Fibrous Histiocytoma TGLs = 3-16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibrous Histiocytoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 323

TRT#: 4

SEX: Female

DAY ON TEST: 646

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62983

ORGAN AND ACCOUNTABLE SITE STATUS

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 324

TRT#: 4

SEX: Female

DAY ON TEST: 537

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62984

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|-------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | Mediastinum | Inflammation | Chronic, Mild |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Lymph Node, Mediastinal | | Congestion | Mild |
| | [Congestion TGLs = 2-4] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 5-9] | | |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | | Metaplasia | Squamous, Minimal |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 325

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62985

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Cholangiocarcinoma | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | [Cholangiocarcinoma TGLs = 1-16] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| | [Inflammation TGLs = 5-18] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 3-19] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 326

TRT#: 4

SEX: Female

DAY ON TEST: 65

DOSE: 100 ppm

DISP: Accidentally Killed

HISTO: 62986

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 | * Kidney | * Larynx |
| * Liver | * Lung | * Lymph Node, Mandibular | * 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 |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | |
|--------|--------------|---------------------|
| * Nose | Inflammation | Acute, Moderate |
| Tooth | Inflammation | Suppurative, Marked |

PRIMARY CAUSE OF DEATH

- Nose Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 327

TRT#: 4

SEX: Female

DAY ON TEST: 646

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62987

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Moderate |
| | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 8-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Mammary Gland | | Adenoma | |
| | | Fibroadenoma | Multiple |
| | [Adenoma TGLs = 2-17] | | |
| | [Fibroadenoma TGLs = 1,3,5-18+19+20+21+22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Minimal |
| | [Cyst TGLs = 4-9] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 327

TRT#: 4

SEX: Female

DAY ON TEST: 646

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62987

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Cervix

Inflammation

Chronic Active, Minimal

Polyp Stromal

[Inflammation TGLs = 7-10]

[Polyp Stromal TGLs = 6-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Adenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 328

TRT#: 4

SEX: Female

DAY ON TEST: 511

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62988

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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | Spinal Cord | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|-------------------|---------------------------------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| Blood Vessel | Aorta | Inflammation | Mild |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 4,5,6-8] | | |
| * Liver | | Eosinophilic Focus | |
| | [Eosinophilic Focus TGLs = 8-16] | | |
| * Lung | | Fibrosis | Minimal |
| | [Inflammation TGLs = 2-5+6] | Inflammation | Chronic, Mild |
| Lymph Node | Renal | Congestion | Mild |
| | [Congestion TGLs = 7-7] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 3-9] | | |
| * Pancreas | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 328

TRT#: 4

SEX: Female

DAY ON TEST: 511

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62988

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 329

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62989

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18+19] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 330

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62990

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| Lymph Node | | Congestion | Minimal |
| | Note: TGL 3 was in the sciatic lymph node, but sciatic was not on list of sites available for entry | | |
| | [Congestion TGLs = 3-16] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17+18+19+20+21] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 331

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62991

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |

MISSING

Vagina

OBSERVATIONS

| | | | |
|--------------------------------------|---------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,2-16+17+18] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 332

TRT#: 4

SEX: Female

DAY ON TEST: 692

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62992

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * 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 |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Bone Marrow | | Atrophy | Marked |
| * Brain | Hypothalamus | Compression | Marked |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Cyst | |
| | [Cyst TGLs = 4-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 3-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 333

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62993

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Ovary | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Thymus

OBSERVATIONS

| | | | |
|-----------------------------|---------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Angiectasis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Adenoma | |
| [Adenoma TGLs = 2-17] | | | |
| * Pancreas | Acinus | Adenoma | |
| | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| [Hyperplasia TGLs = 1-10] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 334

TRT#: 4

SEX: Female

DAY ON TEST: 558

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62994

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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 | * Liver | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|------------------|------------------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | [Hyperplasia TGLs = 4-10] | | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 335

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62995

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------|--|-----------------------|-------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Cyst | |
| | | Fatty Change | Minimal |
| | [Cyst TGLs = 4-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Pancreas | Duct | Cyst | Mild |
| | [Cyst TGLs = 6-17] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 3-10] | | |
| * Stomach, Forestomach | | Inflammation | Chronic Active, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 335

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62995

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

Polyp Stromal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 336

TRT#: 4

SEX: Female

DAY ON TEST: 395

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62996

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 | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------------------|---------------|-------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| Lymph Node | Lumbar | Hyperplasia | Mild |
| [Hyperplasia TGLs = 3-16] | | | |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-17+18+19+20] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Metaplasia | Squamous, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 337

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62997

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| | | Pheochromocytoma Benign | |
| * Clitoral Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 4-8] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Skin | Subcut Tiss | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 3-9] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Carcinoma | |
| | [Carcinoma TGLs = 5-4] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 337

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 62997

ORGAN AND ACCOUNTABLE SITE STATUS

Vagina

Metaplasia

Squamous, Marked

Hyperplasia

Stromal, Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 338

TRT#: 4

SEX: Female

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62998

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Salivary Glands |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|----------------------|--|-------------------------------|------------------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| | Capsule | Schwannoma Malignant | Metastatic (Skeletal Muscle) |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Brain | | Granular Cell Tumor Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Hepatocellular Adenoma | |
| | [Hepatocellular Adenoma TGLs = 10-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 6-5+6] | | |
| Lymph Node | | Hyperplasia | Minimal |
| | Note: Hyperplasia involves the sciatic lymph node, but sciatic not a choice in microscopic lexicon on this screen. | | |
| | [Hyperplasia TGLs = 12-21] | | |
| * Mammary Gland | | Hyperplasia | Cystic, Moderate |
| | [Hyperplasia TGLs = 3,4-16+17] | | |
| Mesentery | | Schwannoma Malignant | Metastatic (Skeletal Muscle) |
| | [Schwannoma Malignant TGLs = 11-22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 338

TRT#: 4

SEX: Female

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62998

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|--|---------------|----------------------------------|------------------------------|
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 7-10] | | | |
| Skeletal Muscle | | Schwannoma Malignant | |
| [Schwannoma Malignant TGLs = 8,9-18] | | | |
| * Skin | Subcut Tiss | Fibroma | |
| [Fibroma TGLs = 2-19+20] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| | | Schwannoma Malignant | Metastatic (Skeletal Muscle) |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |
| [Adenoma TGLs = 5-4] | | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

PRIMARY CAUSE OF DEATH - Skeletal Muscle Schwannoma Malignant
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma
 - Skin Subcut Tiss Fibroma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 339

TRT#: 4

SEX: Female

DAY ON TEST: 585

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 62999

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | Peripheral Nerve | * Pituitary Gland | * Salivary Glands |
| Skeletal Muscle | * Skin | Spinal Cord | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--|---------------|-------------------------------|---------------------|
| * Brain | Cranial Nerve | Schwannoma Malignant | |
| Note: Schwannoma Malignant of Brain, cranial nerve corresponds to gross lesion (#3) of nerve, left trigeminal. [Schwannoma Malignant TGLs = 3-17] | | | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | | Adenoma | |
| | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Brain Cranial Nerve Schwannoma Malignant

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 340

TRT#: 4

SEX: Female

DAY ON TEST: 534

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63000

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Mild |
| | [Adenoma TGLs = 2-4] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 341

TRT#: 4

SEX: Female

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63001

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Cyst | |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 3-5+6] | | |
| Lymph Node | Lumbar | Congestion | Mild |
| | [Congestion TGLs = 5-9] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-16+17+18+19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 4-9] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 341

TRT#: 4

SEX: Female

DAY ON TEST: 674

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63001

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia

Cystic, Moderate

Metaplasia

Squamous, Moderate

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 342

TRT#: 4

SEX: Female

DAY ON TEST: 459

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63002

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|--------------------------|
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | | Dilatation | Marked |
| | Endometrium | Erosion | Minimal |
| | Serosa | Fibrosis | Marked |
| | | Inflammation | Chronic Active, Moderate |
| | | Metaplasia | Squamous, Marked |

[Dilatation TGLs = 3,4,5-10+16]

PRIMARY CAUSE OF DEATH - Uterus Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 343

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63003

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Cyst | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Cyst TGLs = 3-16] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Dilatation | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 343

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63003

ORGAN AND ACCOUNTABLE SITE STATUS

Cervix

Hyperplasia
Inflammation

Squamous, Moderate
Chronic Active, Moderate

[Dilatation TGLs = 2-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 344

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63004

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|------------------|-------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Squamous, Minimal |
| | [Inflammation TGLs = 1-5+6] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 345

TRT#: 4

SEX: Female

DAY ON TEST: 640

DOSE: 100 ppm

DISP: Natural Death

HISTO: 63005

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

OBSERVATIONS

| | | | |
|------------------|---------------|----------------------------------|---------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 346

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63006

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--|---------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Moderate |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Clitoral Gland | | Cyst | Mild |
| [Cyst TGLs = 3-9] | | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| [Mixed Cell Focus TGLs = 4-27] | | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 5-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,2-18+19+20+21+22+23+24+25+26] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 346

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63006

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------------|--------|----------------------------------|---------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | | Polyp Stromal | |
| [Polyp Stromal TGLs = 6-10] | | | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 347

TRT#: 4

SEX: Female

DAY ON TEST: 648

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63007

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Moderate |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | [Hepatocellular Adenoma TGLs = 6-7] | Hepatocellular Adenoma | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | [Adenoma TGLs = 1-4] | | |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 348

TRT#: 4

SEX: Female

DAY ON TEST: 673

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63008

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Moderate |
| * Kidney | | Nephropathy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Hyperplasia | Cystic, Mild |
| | [Hyperplasia TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | Follicular Cel | Adenoma | |
| | C Cell | Hyperplasia | Mild |
| * Uterus | | Dilatation | Marked |
| | [Dilatation TGLs = 3-10] | | |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 349

TRT#: 4

SEX: Female

DAY ON TEST: 458

DOSE: 100 ppm

DISP: Moribund Sacrifice

HISTO: 63009

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 | * Liver |
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-----------------|------------------------------------|----------------------------------|---------------------|
| * Kidney | | Nephropathy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 350

TRT#: 4

SEX: Female

DAY ON TEST: 731

DOSE: 100 ppm

DISP: Terminal Sacrifice

HISTO: 63010

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Intermed | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| Vagina | | Inflammation | Suppurative, Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 501

TRT#: 6

SEX: Female

DAY ON TEST: 714

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62861

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|-----------------------|
| * Adrenal Cortex | | Thrombosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Hyperplasia | Minimal |
| | | Nephropathy | Marked |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Inflammation | Suppurative, Moderate |
| | [Inflammation TGLs = 2-9] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 3-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| * Uterus | | Adenomyosis | Mild |
| | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 501

TRT#: 6

SEX: Female

DAY ON TEST: 714

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62861

ORGAN AND ACCOUNTABLE SITE STATUS

Metaplasia

Squamous, Minimal

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

CONTRIBUTORY CAUSE OF DEATH - Ovary Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 502

TRT#: 6

SEX: Female

DAY ON TEST: 558

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62862

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|------------------|------------------------------------|----------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| Peripheral Nerve | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 503

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Hematopoietic Cell Proliferation | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |
| | [Adenoma TGLs = 2-4] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 503

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62863

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Dilatation

Marked

Metaplasia

Squamous, Marked

Sarcoma Stromal

[Dilatation TGLs = 4-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 504

TRT#: 6

SEX: Female

DAY ON TEST: 642

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62864

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | Peripheral Nerve |
| * Salivary Glands | Skeletal Muscle | * Skin | Spinal Cord |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Marked |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Fatty Change | Minimal |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | Multiple |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 505

TRT#: 6

SEX: Female

DAY ON TEST: 654

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62865

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Marked |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Moderate |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| Lymph Node | Iliac | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 5-7] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Mild |
| * Ovary | | Cyst | Minimal |
| | [Cyst TGLs = 3-9] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 505

TRT#: 6

SEX: Female

DAY ON TEST: 654

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62865

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 6-1+10]

* Thymus

* Uterus

Vagina

[Cyst TGLs = 4-16]

Endometrium

Atrophy

Hyperplasia

Metaplasia

Cyst

Minimal

Cystic, Mild

Squamous, Moderate

Squamous

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

- Vagina Cyst

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 506

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62866

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|-------------------------------|--------------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infarct | Mild |
| | Pelvis | Inflammation | Chronic Active, Moderate |
| | Interstitium | Inflammation | Chronic Active, Moderate |
| | | Nephropathy | Mild |
| | [Infarct TGLs = 5-8] | | |
| * Liver | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 1-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Squamous, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Skin | Subcut Tiss | Schwannoma Malignant | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 506

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62866

ORGAN AND ACCOUNTABLE SITE STATUS

[Schwannoma Malignant TGLs = 3-16]

| | | | |
|-----------------|-------------|----------------------------------|--------------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| * Uterus | | Hemorrhage | Mild |
| | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | Multiple |
| | | Thrombosis | Mild |

[Hyperplasia TGLs = 6-10]

[Polyp Stromal TGLs = 7-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 507

TRT#: 6

SEX: Female

DAY ON TEST: 702

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62867

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| | Lymph Node | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 4-20] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18+19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | Follicular Cel | Hyperplasia | Mild |
| | C Cell | Hyperplasia | Minimal |
| | [Hyperplasia TGLs = 2-4] | | |
| * Uterus | Endometrium | Atypical Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 507

TRT#: 6

SEX: Female

DAY ON TEST: 702

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62867

ORGAN AND ACCOUNTABLE SITE STATUS

Endometrium

Hyperplasia

Cystic, Mild

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 508

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62868

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 3-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Degeneration | Minimal |
| * Ovary | | Cyst | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| | | Cyst | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Metaplasia | Squamous, Minimal |
| | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 509

TRT#: 6

SEX: Female

DAY ON TEST: 458

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62869

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 |
| * Lymph Node, Mandibular | * 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, Bronchial

OBSERVATIONS

| | | | |
|------------------|----------------------------|----------------------------------|-----------------------|
| * Adrenal Cortex | | Angiectasis | Moderate |
| | | Necrosis | Moderate |
| | [Necrosis TGLs = 3-8] | | |
| * Clitoral Gland | | Cyst | Mild |
| * Kidney | | Nephropathy | Minimal |
| | [Nephropathy TGLs = 5-8] | | |
| * Larynx | | Inflammation | Mild |
| * Liver | | Fatty Change | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Uterus | | Inflammation | Suppurative, Marked |
| | | Metaplasia | Squamous, Moderate |
| | | Necrosis | Moderate |
| | [Necrosis TGLs = 4-10] | | |
| Vagina | | Inflammation | Suppurative, Moderate |
| | | Ulcer | Moderate |

PRIMARY CAUSE OF DEATH - Uterus Necrosis

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 510

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62870

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Hypertrophy | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | | Hyperplasia | Cystic, Mild |
| | [Adenocarcinoma TGLs = 1-16] | | |
| | [Hyperplasia TGLs = 2-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Olfactory Epi | Degeneration | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 510

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62870

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|-------------|---------------|-----------------|
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | | Polyp Stromal | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 511

TRT#: 6

SEX: Female

DAY ON TEST: 665

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62871

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * 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, Mediastinal | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--------------------------|---------------------------------------|-------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| | | Leukemia Mononuclear | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Heart | | Cardiomyopathy | Minimal |
| | | Leukemia Mononuclear | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 3-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 2-5+6] | | |
| * Lymph Node, Bronchial | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 1-16] | | |
| * Lymph Node, Mandibular | | Leukemia Mononuclear | |
| * Lymph Node, Mesenteric | | Leukemia Mononuclear | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | | Cyst | Minimal |
| * Spleen | | Leukemia Mononuclear | |
| | [Leukemia Mononuclear TGLs = 4-7] | | |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 511

TRT#: 6

SEX: Female

DAY ON TEST: 665

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62871

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 512

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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 | * Liver | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 2-16+17] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 1-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 513

TRT#: 6

SEX: Female

DAY ON TEST: 692

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62873

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|---|---------------|-------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Brain | Hypothalamus | Compression | Marked |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| [Congestion TGLs = 8-19] | | | |
| * Mammary Gland | | Adenocarcinoma | |
| | | Fibroadenoma | Multiple |
| [Adenocarcinoma TGLs = 6-18] | | | |
| [Fibroadenoma TGLs = 1,2,3,5,-16+17+19+20+21] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| [Cyst TGLs = 7-9] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 4-10] | | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 513

TRT#: 6

SEX: Female

DAY ON TEST: 692

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62873

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 514

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | Zymbal's Gland |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Marked |
| | | Hypertrophy | Minimal |
| | [Angiectasis TGLs = 4-8] | | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Cyst | |
| | [Cyst TGLs = 1-23] | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 2,3-17+18+19+20+21+22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 515

TRT#: 6

SEX: Female

DAY ON TEST: 584

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62875

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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

OBSERVATIONS

| | | | |
|-----------------|--|----------------------------------|---------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | | Hematopoietic Cell Proliferation | Minimal |
| | [Fatty Change TGLs = 5-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 4-5+6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 3-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Mammary Gland Adenocarcinoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 516

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Clear Cell Focus | |
| | | Cyst | |
| | Bile Duct | Eosinophilic Focus | |
| | [Cyst TGLs = 4-7] | Hyperplasia | Minimal |
| | [Eosinophilic Focus TGLs = 3-16] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 5-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 517

TRT#: 6

SEX: Female

DAY ON TEST: 668

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62877

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Salivary Glands | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Angiectasis | Minimal |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Mixed Cell Focus | |
| | [Angiectasis TGLs = 5-17] | | |
| | [Eosinophilic Focus TGLs = 9-18] | | |
| | [Mixed Cell Focus TGLs = 6-16] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-19+20+21+22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 8-9] | | |
| * Pancreas | Acinus | Basophilic Focus | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 517

TRT#: 6

SEX: Female

DAY ON TEST: 668

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62877

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 4-10]

| | | | |
|-----------------|-------------|----------------------------------|--------------|
| * Skin | | Cyst Epithelial Inclusion | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | Multiple |
| Vagina | | Schwannoma Malignant | |

[Schwannoma Malignant TGLs = 7-16]

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH - Vagina Schwannoma Malignant

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 518

TRT#: 6

SEX: Female

DAY ON TEST: 602

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62878

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Harderian Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Artery | Inflammation | Mild |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 519

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62879

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|---------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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 |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-----------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Moderate |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | Bile Duct | Dilatation | Marked |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Cyst TGLs = 6-7] | | |
| | [Dilatation TGLs = 5-16] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-17+18+19] | | |
| * Ovary | | Cyst | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 519

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62879

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 4-10]

| | | | |
|----------|-------------|----------------------------------|--------------|
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Adenomyosis | Mild |
| | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 520

TRT#: 6

SEX: Female

DAY ON TEST: 541

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62880

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, 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 |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|----------------------------|-------------------------------|------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Angiectasis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | [Angiectasis TGLs = 2-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 521

TRT#: 6

SEX: Female

DAY ON TEST: 459

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62881

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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 | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---|---------------|--|--------------------------------------|
| * Clitoral Gland [Cyst TGLs = 2-9] | | Cyst | Mild |
| * Lung | | Inflammation Metaplasia Fibroadenoma | Chronic, Minimal Osseous, Minimal |
| * Mammary Gland [Fibroadenoma TGLs = 1-17+18+19] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Skin [Cyst Epithelial Inclusion TGLs = 3-16] | | Cyst Epithelial Inclusion | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 522

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62882

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Minimal |
| | Alveolar Epith | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 523

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62883

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * 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 | * Mammary Gland |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|--|---------------|----------------------------------|------------------|
| * Adrenal Cortex | | Adenoma | |
| [Adenoma TGLs = 5-8] | | | |
| * Brain | Hypothalamus | Compression | Moderate |
| * Clitoral Gland | | Adenoma | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| [Nephropathy TGLs = 4-8] | | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| [Cyst TGLs = 1-7] | | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Osseous, Minimal |
| [Infiltration Cellular TGLs = 2-5+6] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 3-10] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 523

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62883

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia
Polyp Stromal

Cystic, Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 524

TRT#: 6

SEX: Female

DAY ON TEST: 523

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62884

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--------------------------------|----------------------------------|-------------------|
| * Adrenal Cortex | | Hematopoietic Cell Proliferation | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 2,3-8] | | |
| * Liver | Bile Duct | Cyst | |
| | | Hematopoietic Cell Proliferation | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic, Moderate |
| | [Inflammation TGLs = 1-5+6] | | |
| * Mammary Gland | | Cyst | Mild |
| | [Cyst TGLs = 4,5,6-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 525

TRT#: 6

SEX: Female

DAY ON TEST: 590

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62885

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Angiectasis | Minimal |
| | | Clear Cell Focus | |
| | | Mixed Cell Focus | |
| | [Angiectasis TGLs = 2-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 526

TRT#: 6

SEX: Female

DAY ON TEST: 702

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62886

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * 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 | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Hepatodiaphragmatic Nodule | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | [Hepatodiaphragmatic Nodule TGLs = 5-7] | | |
| | | Fibrosis | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 4-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2,3-16+17+18+19+20] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 527

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62887

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------------------|-------------|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Moderate |
| [Degeneration TGLs = 4-8] | | | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Moderate |
| [Nephropathy TGLs = 3-8] | | | |
| * Lung | | Fibrosis | Mild |
| [Inflammation TGLs = 2-5+6] | | Inflammation | Chronic, Mild |
| * Pancreas | Artery | Inflammation | Moderate |
| * Parathyroid Gland | | Hyperplasia | Mild |
| [Hyperplasia TGLs = 1-4] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |
| | | Metaplasia | Squamous, Mild |
| | | Polyp Stromal | |
| [Polyp Stromal TGLs = 5-10] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 528

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62888

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

| | |
|---------------------|----------|
| * Parathyroid Gland | * Thymus |
|---------------------|----------|

OBSERVATIONS

| | | | |
|--|---------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Hepatocellular Adenoma | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| [Hepatocellular Adenoma TGLs = 3-16] | | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| [Infiltration Cellular TGLs = 2-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-17] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 528

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62888

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Mild

Ultimobranchial Cyst

Multiple

* Uterus

Polyp Stromal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 529

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62889

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Eosinophilic Focus | |
| * Lung | | Fibrosis | Mild |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1,2-16+17+18+19] | | |
| * Nose | | Inflammation | Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |
| * Uterus | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 530

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62890

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * Harderian Gland | * Intestine Large, Cecum |
| * 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 |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|--------------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Thrombosis | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Large, Colon | Artery, Serosa | Inflammation | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 3-8] | | |
| * Liver | | Angiectasis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | [Angiectasis TGLs = 1-7] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Glandular | Artery | Inflammation | Mild |
| | [Inflammation TGLs = 4-10] | | |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 530

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62890

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Endometrium

Hyperplasia

Cystic, Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 531

TRT#: 6

SEX: Female

DAY ON TEST: 564

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62891

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|---------------------------|---|-------------------------------|-------------------|
| * Adrenal Cortex | | Lymphoma Malignant | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Lymphoma Malignant | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | Lymphoma Malignant | |
| Lymph Node | Pancreatic | Lymphoma Malignant | |
| * Lymph Node, Mediastinal | | Lymphoma Malignant | |
| | [Lymphoma Malignant TGLs = 2-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Lymphoma Malignant | |
| | [Lymphoma Malignant TGLs = 5-16] | | |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Inflammation | Suppurative, Mild |
| | | Metaplasia | Squamous, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 531

TRT#: 6

SEX: Female

DAY ON TEST: 564

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62891

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 6-10]

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 532

TRT#: 6

SEX: Female

DAY ON TEST: 717

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62892

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18+19+20+21] | | |
| * Nose | | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Polyp Stromal | |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 533

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62893

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Clitoral Gland | * Esophagus | * Eye | * 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 | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|----------------------|
| * Adrenal Cortex | | Degeneration Hypertrophy | Cystic, Mild Mild |
| | [Degeneration TGLs = 4-8] | | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Harderian Gland | | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | [Mixed Cell Focus TGLs = 5-16] | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 7-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 533

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62893

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Moderate

* Uterus

Endometrium

Hyperplasia

Cystic, Mild

[Hyperplasia TGLs = 6-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 534

TRT#: 6

SEX: Female

DAY ON TEST: 643

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62894

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * 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 | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

| | |
|------------------|-------------------------|
| * Clitoral Gland | * Lymph Node, Bronchial |
|------------------|-------------------------|

OBSERVATIONS

| | | | |
|-------------------|--------------------------------------|----------------------------------|---------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Necrosis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Brain | Hypothalamus | Compression | Moderate |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Moderate |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 2,4-17+18+19] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 5-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 534

TRT#: 6

SEX: Female

DAY ON TEST: 643

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62894

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 535

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62895

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

Vagina

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| | [Inflammation TGLs = 3-9] | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Hemangioma | |
| | Hepatocyte | Necrosis | Mild |
| | [Hemangioma TGLs = 5-7] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | | Yolk Sac Carcinoma | Metastatic (Ovary) |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| Mesentery | | Yolk Sac Carcinoma | Metastatic (Ovary) |
| | [Yolk Sac Carcinoma TGLs = 6-19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Yolk Sac Carcinoma | |
| | [Yolk Sac Carcinoma TGLs = 4-16] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 535

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62895

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------|---|----------------------------------|--------------------|
| * Skin | | Cyst Epithelial Inclusion | Mild |
| | [Cyst Epithelial Inclusion TGLs = 2-18] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| | | Yolk Sac Carcinoma | Metastatic (Ovary) |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Mild |
| | [Adenoma TGLs = 7-4] | | |
| * Uterus | | Polyp Stromal | |
| | [Polyp Stromal TGLs = 8-17] | Yolk Sac Carcinoma | Metastatic (Ovary) |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 536

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62896

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Parathyroid Gland | | Adenoma | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Metaplasia | Squamous, Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 537

TRT#: 6

SEX: Female

DAY ON TEST: 605

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62897

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Liver | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------|--|---------------------------------|-----------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Lung | | Cystic Keratinizing Epithelioma | |
| | Bronchiole | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | Nasopharyn Dct | Inflammation | Suppurative, Moderate |
| | [Inflammation TGLs = 4-12] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| | | Ultimobranchial Cyst | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Nose Nasopharyn Dct Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 538

TRT#: 6

SEX: Female

DAY ON TEST: 666

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62898

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|--|---------------|-------------------------------|---------------------|
| * Adrenal Cortex [Degeneration TGLs = 4-8] | | Degeneration | Cystic, Moderate |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Eye [Schwannoma Malignant TGLs = 7-13] | | Schwannoma Malignant | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney [Cyst TGLs = 5-16] | | Cyst Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Mild |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| * Mammary Gland [Fibroadenoma TGLs = 3-5+6] | | Fibroadenoma | Multiple |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Ovary | | Cyst | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 538

TRT#: 6

SEX: Female

DAY ON TEST: 666

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62898

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------------|---------------|----------------------------------|--------------|
| [Cyst TGLs = 6-9] | | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 8-10] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 539

TRT#: 6

SEX: Female

DAY ON TEST: 395

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62899

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|---------------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Hepatocyte, Periportal | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| Lymph Node | Renal | Congestion | Mild |
| | Iliac | Congestion | Mild |
| | [Congestion TGLs = 5-7] | | |
| | [Congestion TGLs = 6-18] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 540

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62900

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Blood Vessel | * Bone | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Leukemia Mononuclear | |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| | [Pheochromocytoma Benign TGLs = 4-8] | | |
| * Bone Marrow | | Leukemia Mononuclear | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Eosinophilic Focus | |
| | | Leukemia Mononuclear | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Leukemia Mononuclear | |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Parathyroid Gland | | Adenoma | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 3-10] | | |
| * Spleen | | Leukemia Mononuclear | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 540

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62900

ORGAN AND ACCOUNTABLE SITE STATUS

[Leukemia Mononuclear TGLs = 5,6-7]

* Thymus

* Thyroid Gland

* Uterus

Vagina

C Cell

Endometrium

Atrophy

Hyperplasia

Hyperplasia

Polyp Stromal

Paraganglioma

Marked

Minimal

Cystic, Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 541

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62901

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | | Eosinophilic Focus | |
| | [Cyst TGLs = 6-16] | | |
| | [Eosinophilic Focus TGLs = 1-7] | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 5-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 2,3,4-17+18+19+20+21+22+23] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Vacuolization Cytoplasmic | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 542

TRT#: 6

SEX: Female

DAY ON TEST: 640

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62902

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Brain | Hypothalamus | Compression | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Skin | Subcut Tiss | Hibernoma | |
| | [Hibernoma TGLs = 5-9] | | |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | [Hyperplasia TGLs = 3-7] | | |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 543

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62903

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|---------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Granulosa-Theca Tumor Benign | |
| * Parathyroid Gland | | Fibrosis | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | Multiple |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 544

TRT#: 6

SEX: Female

DAY ON TEST: 478

DOSE: 300 ppm

DISP: Moribund Sacrifice

HISTO: 62904

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---------------------------|------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| [Pheochromocytoma Benign | TGLs = 3-8] | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma | TGLs = 1-16+17+18+19] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 545

TRT#: 6

SEX: Female

DAY ON TEST: 457

DOSE: 300 ppm

DISP: Natural Death

HISTO: 62905

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, Mandibular |
| * 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, Bronchial

OBSERVATIONS

| | | | |
|----------|--|----------------------------------|--------------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Moderate |
| * Uterus | | Dilatation | Marked |
| | | Hemorrhage | Moderate |
| | | Inflammation | Chronic Active, Moderate |
| | | Metaplasia | Squamous, Moderate |
| | [Dilatation TGLs = 1,2-16] | | |
| Vagina | | Inflammation | Chronic, Mild |

PRIMARY CAUSE OF DEATH - Uterus Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 546

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62906

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-----------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | Renal Tubule | Hyperplasia | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 547

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62907

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|-------------------------------|-------------------|
| * Adrenal Cortex | | Adenoma | |
| | | Angiectasis | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hepatocellular Carcinoma | |
| | Bile Duct | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Hepatocellular Carcinoma TGLs = 4-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Mild |
| | | Metaplasia | Squamous, Minimal |
| | [Inflammation TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| | [Hyperplasia TGLs = 3-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 547

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62907

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|----------|----------------------------------|---------|
| * Spleen | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | Atrophy | Marked |
| * Uterus | Dilatation | Mild |

[Dilatation TGLs = 5-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 548

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62908

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 549

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62909

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--|---------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Harderian Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Angiectasis | Minimal |
| | Bile Duct | Cyst | Multiple |
| | Bile Duct | Hyperplasia | Minimal |
| [Cyst TGLs = 5,6-7+16] | | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 3-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,4-17+18+19] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 549

TRT#: 6

SEX: Female

DAY ON TEST: 731

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62909

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Adenoma

[Adenoma TGLs = 2-4]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 550

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 300 ppm

DISP: Terminal Sacrifice

HISTO: 62910

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|-------------------|----------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 2-8] | | |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Nose | | Inflammation | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 1-9] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | | Metaplasia | Squamous, Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 701

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62761

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|-------------------------------|---------------------------|----------------------------------|----------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Cyst | Mild |
| [Cyst TGLs = 1-9] | | | |
| * Harderian Gland | | Hyperplasia | Moderate |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| * Lung | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| [Inflammation TGLs = 3-5+6] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| [Hyperplasia TGLs = 4-10] | | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Marked |
| [Hyperplasia TGLs = 2-4] | | | |
| * Uterus | | Adenomyosis | Mild |
| | Endometrium | Hyperplasia | Cystic, Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 702

TRT#: 8

SEX: Female

DAY ON TEST: 626

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62762

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------|---|----------------------------------|--------------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | Serosa | Inflammation | Chronic Active, Moderate |
| | Hepatocyte | Necrosis | Mild |
| | [Inflammation TGLs = 6-7] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | | Inflammation | Chronic, Moderate |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Moderate |
| | [Hematopoietic Cell Proliferation TGLs = 4-7] | | |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| | Serosa | Inflammation | Chronic Active, Mild |
| * Thymus | | Atrophy | Marked |
| * Uterus | Serosa | Inflammation | Chronic Active, Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 702

TRT#: 8

SEX: Female

DAY ON TEST: 626

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62762

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|------------------------------|--------------|-----------------------|
| [Inflammation TGLs = 5-16] | Inflammation | Suppurative, Marked |
| Vagina | Inflammation | Suppurative, Moderate |

PRIMARY CAUSE OF DEATH - Uterus Serosa Inflammation

CONTRIBUTORY CAUSE OF DEATH - Liver Serosa Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 703

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62763

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| * Clitoral Gland | | Cyst | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | | Hypertrophy | Moderate |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 4-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 1-9] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |
| | | Polyp Stromal | |
| | [Polyp Stromal TGLs = 2-10] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 704

TRT#: 8

SEX: Female

DAY ON TEST: 646

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62764

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

* Parathyroid Gland Vagina

OBSERVATIONS

| | | | |
|---------------------------|----------------------------|-------------------------------|----------------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Carcinoma | Metastatic (Thyroid Gland) |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Carcinoma TGLs = 3-5+6] | | |
| Lymph Node | Deep Cervical | Carcinoma | Metastatic (Thyroid Gland) |
| | [Carcinoma TGLs = 4-16] | | |
| * Lymph Node, Mediastinal | | Carcinoma | Metastatic (Thyroid Gland) |
| | [Carcinoma TGLs = 2-4] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Moderate |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Carcinoma | |
| | [Carcinoma TGLs = 1-4] | | |

PRIMARY CAUSE OF DEATH - Thyroid Gland C Cell Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 705

TRT#: 8

SEX: Female

DAY ON TEST: 702

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62765

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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 | * Kidney | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

OBSERVATIONS

| | | | |
|------------------|--|----------------------------------|-----------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Clear Cell Focus TGLs = 5-23] | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | [Inflammation TGLs = 4-5+6] | Inflammation | Chronic, Mild |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2,3-16+17+18+19+20+21+22] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 706

TRT#: 8

SEX: Female

DAY ON TEST: 549

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62766

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |
| Zymbal's Gland | | | |

OBSERVATIONS

| | | | |
|-------------------|-----------------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Fibrosis | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | Multiple |
| | [Fibroadenoma TGLs = 1,2-17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 4-16] | | |
| * Salivary Glands | | Atrophy | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Mild |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 707

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62767

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------------------|---------------------------|----------------------------------|---------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| [Cyst TGLs = 2-7] | | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| [Inflammation TGLs = 1-5+6] | | | |
| * Nose | | Inflammation | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| * Uterus | | Adenomyosis | Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 708

TRT#: 8

SEX: Female

DAY ON TEST: 618

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62768

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * 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, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Harderian Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | Hepatocyte | Hypertrophy | Minimal |
| | | Necrosis | Minimal |
| | [Necrosis TGLs = 2-7] | | |
| * Lung | Alveolus | Fibrosis | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 709

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62769

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | | |
|-------------------------|---------------------------|--------|
| * Lymph Node, Bronchial | * Lymph Node, Mediastinal | Vagina |
|-------------------------|---------------------------|--------|

OBSERVATIONS

| | | | |
|--|---------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Necrosis | Moderate |
| [Necrosis TGLs = 6-8] | | | |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Islets, Pancreatic | | Adenoma | |
| * Kidney | | Nephropathy | Moderate |
| [Nephropathy TGLs = 5-8] | | | |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | | Fatty Change | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| [Clear Cell Focus TGLs = 4-7] | | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 2-5+6] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| [Adenoma TGLs = 3-10] | | | |
| * Skin | Sebaceous Gl | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 709

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62769

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 1-17]

* Thymus

Atrophy

Marked

* Uterus

Cervix

Cyst

Squamous

[Cyst TGLs = 7-16]

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 710

TRT#: 8

SEX: Female

DAY ON TEST: 698

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62770

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|----------------------------|-----------------------|--------------------------|
| * Adrenal Cortex | | Angiectasis | Moderate |
| | | Hyperplasia | Minimal |
| | | Thrombosis | Moderate |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| | [Cyst TGLs = 7-19] | | |
| * Kidney | | Nephropathy | Mild |
| | [Nephropathy TGLs = 8-8] | | |
| * Larynx | | Bacterium | |
| | | Fibrosis | Marked |
| | | Inflammation | Chronic Active, Moderate |
| | | Necrosis | Moderate |
| | [Fibrosis TGLs = 3-16] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | Vein | Thrombosis | Minimal |
| * Lung | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Mild |
| | | Inflammation | Chronic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 710

TRT#: 8

SEX: Female

DAY ON TEST: 698

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62770

ORGAN AND ACCOUNTABLE SITE STATUS

| | | |
|--|----------------------------------|-------------------------------|
| [Infiltration Cellular TGLs = 4-5+6] | | |
| * Mammary Gland | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,2-17+18] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet |
| * Pituitary Gland | Pars Intermed | Adenoma |
| [Adenoma TGLs = 6-10] | | |
| * Skin | Inflammation | Moderate |
| [Inflammation TGLs = 5-17] | | |
| * Spleen | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Larynx Fibrosis

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 711

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62771

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

| | |
|-------------------------|---------------------|
| * Lymph Node, Bronchial | * Parathyroid Gland |
|-------------------------|---------------------|

OBSERVATIONS

| | | | |
|-------------------|--|--|------------------|
| * Adrenal Medulla | | Hyperplasia Pheochromocytoma Benign | Moderate |
| | [Pheochromocytoma Benign TGLs = 3-8] | | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 1-5+6] | | |
| Lymph Node | Iliac | Ectasia | Mild |
| | [Ectasia TGLs = 4-16] | | |
| * Mammary Gland | | Fibroadenoma | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 2-9] | | |
| * Pancreas | Artery | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 711

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62771

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|-------------|----------|
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Thymus | | Atrophy | Mild |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 712

TRT#: 8

SEX: Female

DAY ON TEST: 642

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62772

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|------------------|---|-------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Cyst | |
| | | Nephropathy | Moderate |
| | [Nephropathy TGLs = 3,4-8+17] | | |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Hepatocellular Adenoma | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Hepatocellular Adenoma TGLs = 5-16] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Cyst | Mild |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| | Artery | Inflammation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 712

TRT#: 8

SEX: Female

DAY ON TEST: 642

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62772

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|----------------------|----------------|
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Atypical Hyperplasia | Mild |
| | Endometrium | Hyperplasia | Cystic, Mild |
| | | Metaplasia | Squamous, Mild |

[Hyperplasia TGLs = 2-10]

PRIMARY CAUSE OF DEATH - Kidney Nephropathy

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 713

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62773

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| | [Eosinophilic Focus TGLs = 4,5-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Mammary Gland | | Adenoma | |
| | [Adenoma TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 713

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62773

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLs = 2-4]

* Uterus

Endometrium

Hyperplasia

Polyp Stromal

Cystic, Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 714

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62774

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|---------------------------|----------------------------|
| * 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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Moderate |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 714

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62774

ORGAN AND ACCOUNTABLE SITE STATUS

[Hyperplasia TGLs = 1-4]

C Cell

Hyperplasia

Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 715

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62775

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | 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 | * Kidney | * Larynx | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------|--|----------------------------------|-------------------------|
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18] | | |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 3,4-9+16] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Stomach, Forestomach | Epithelium | Hyperplasia | Minimal |
| | | Inflammation | Chronic Active, Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 715

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62775

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

* Uterus

Leiomyosarcoma

Polyp Stromal

Multiple

[Leiomyosarcoma TGLs = 5-17]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 716

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62776

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Pancreas |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

| | | |
|-------------------------|---------------------|--------|
| * Lymph Node, Bronchial | * Parathyroid Gland | Vagina |
|-------------------------|---------------------|--------|

OBSERVATIONS

| | | | |
|------------------------------|---------------------------|----------------------------------|-----------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hyperplasia | Minimal |
| | | Hypertrophy | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| [Inflammation TGLs = 1-16] | | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Nose | Respirat Epith | Inflammation | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| * Uterus | Endometrium | Atypical Hyperplasia | Mild |
| | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 717

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62777

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--------------------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Degeneration | Cystic, Mild |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Marked |
| | [Nephropathy TGLs = 6,7-8+17] | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | Hepatocyte | Necrosis | Minimal |
| | [Cyst TGLs = 8-7] | | |
| | [Mixed Cell Focus TGLs = 9-16] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 4-6] | | |
| * Mammary Gland | | Fibroadenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 717

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62777

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-----------------------------------|---------------|----------------------------------|-----------------|
| [Fibroadenoma TGLs = 1,2-18+19] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| [Cyst TGLs = 5-9] | | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Urinary Bladder | | Polyp, Inflammatory | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 718

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62778

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * 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 | * Ovary | * Pancreas |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | |

MISSING

| | | |
|-------------------------|---------------------|--------|
| * Lymph Node, Bronchial | * Parathyroid Gland | Vagina |
|-------------------------|---------------------|--------|

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Harderian Gland | | Inflammation | Mild |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Eosinophilic Focus | |
| | | Fatty Change | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Eosinophilic Focus TGLs = 3-16] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |
| | [Adenoma TGLs = 1-4] | | |
| * Uterus | | Polyp Stromal | Multiple |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 718

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62778

ORGAN AND ACCOUNTABLE SITE STATUS

[Polyp Stromal TGLs = 4,5-10+17]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 719

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62779

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 4-16] | | |
| * Lung | Alveolus | Fibrosis | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 5-9] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 719

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62779

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|------------------------|-------------|-------------|-----------------|
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| [Adenoma TGLs = 2-4] | | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 720

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62780

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Ovary | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | | |

MISSING

* Parathyroid Gland Vagina

OBSERVATIONS

| | | | |
|--------------------------------------|---------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Moderate |
| * Clitoral Gland | | Inflammation | Mild |
| [Inflammation TGLs = 1-9] | | | |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | Hepatocyte | Necrosis | Minimal |
| [Eosinophilic Focus TGLs = 3-7] | | | |
| * Lung | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |
| [Adenoma TGLs = 2-4] | | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 720

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62780

ORGAN AND ACCOUNTABLE SITE STATUS

Polyp Stromal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 721

TRT#: 8

SEX: Female

DAY ON TEST: 702

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62781

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Salivary Glands | * Skin |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|---------------------------|--------------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Mild |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | Hepatocyte | Necrosis | Minimal |
| * Lung | | Adenocarcinoma | Metastatic (Uterus) |
| | [Inflammation TGLs = 2-5+6] | Inflammation | Chronic, Minimal |
| * Lymph Node, Mediastinal | | Adenocarcinoma | Metastatic (Uterus) |
| Mesentery | | Adenocarcinoma | Metastatic (Uterus) |
| | [Adenocarcinoma TGLs = 5-16] | | |
| * Ovary | | Cyst | Minimal |
| * Pancreas | | Adenocarcinoma | Metastatic (Uterus) |
| * Parathyroid Gland | | Fibrosis | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| Skeletal Muscle | | Adenocarcinoma | Metastatic (Uterus) |
| | [Adenocarcinoma TGLs = 3-17] | | |
| * Spleen | | Adenocarcinoma | Metastatic (Uterus) |
| | | Hematopoietic Cell Proliferation | Mild |
| * Stomach, Forestomach | | Adenocarcinoma | Metastatic (Uterus) |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 721

TRT#: 8

SEX: Female

DAY ON TEST: 702

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62781

ORGAN AND ACCOUNTABLE SITE STATUS

* Thymus

Atrophy

Marked

* Uterus

Adenocarcinoma

[Adenocarcinoma TGLs = 4-16]

PRIMARY CAUSE OF DEATH

- Uterus Adenocarcinoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 722

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62782

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Adenocarcinoma | |
| | [Adenocarcinoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | C Cell | Hyperplasia | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 722

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62782

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia
Polyp Stromal

Cystic, Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 723

TRT#: 8

SEX: Female

DAY ON TEST: 698

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62783

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|-------------------------------|----------------------------------|------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Inflammation TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Artery | Inflammation | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| Zymbal's Gland | | Carcinoma | |
| | [Carcinoma TGLs = 2-16] | | |

PRIMARY CAUSE OF DEATH - Zymbal's Gland Carcinoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 724

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62784

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Thrombosis | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | Centrilobular, Hepatocyte | Eosinophilic Focus | |
| | [Eosinophilic Focus TGLs = 2-7] | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | Alveolus | Hemorrhage | Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | Infiltration Cellular | Histiocyte, Minimal |
| Mesentery | Artery | Inflammation | Chronic, Mild |
| | [Inflammation TGLs = 4-16] | Inflammation | Moderate |
| * Pituitary Gland | | Cyst | Minimal |
| | [Cyst TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |
| * Uterus | Artery | Inflammation | Chronic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 724

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62784

ORGAN AND ACCOUNTABLE SITE STATUS

Artery

Necrosis

Fibrinoid, Mild

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 725

TRT#: 8

SEX: Female

DAY ON TEST: 590

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62785

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|---|---------------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Cyst | Minimal |
| [Cyst TGLs = 3-9] | | | |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| [Clear Cell Focus TGLs = 5-20] | | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 4-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,2-16+17+18+19] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pancreas | Acinus | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 726

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62786

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 3-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 726

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62786

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia

Cystic, Minimal

Polyp Stromal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 727

TRT#: 8

SEX: Female

DAY ON TEST: 650

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62787

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |

MISSING

| | | |
|-------------------------|---------------------|--------|
| * Lymph Node, Bronchial | * Parathyroid Gland | Vagina |
|-------------------------|---------------------|--------|

OBSERVATIONS

| | | | |
|-------------------|---|-----------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 3-16] | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6+17] | | |
| * Pituitary Gland | Pars Intermed | Adenoma | |
| | [Adenoma TGLs = 2-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 728

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62788

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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 | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---------------------------|----------------------------------|-------------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Fibrosis | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Inflammation | Chronic Active, Minimal |
| | [Fibrosis TGLs = 1-16] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Moderate |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Adenomyosis | Marked |
| | Endometrium | Atypical Hyperplasia | Moderate |
| | Endometrium | Hyperplasia | Cystic, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 729

TRT#: 8

SEX: Female

DAY ON TEST: 558

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62789

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|--------------------------|-----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lymph Node, Bronchial |
| * Mammary Gland | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

OBSERVATIONS

| | | | |
|---------------------------|---|--------------------|--------------------|
| * Adrenal Cortex | | Lymphoma Malignant | |
| * Adrenal Medulla | | Lymphoma Malignant | |
| * Brain | | Lymphoma Malignant | |
| * Clitoral Gland | | Lymphoma Malignant | |
| * Esophagus | | Lymphoma Malignant | |
| * Heart | | Lymphoma Malignant | |
| * Intestine Large, Rectum | | Lymphoma Malignant | |
| * Kidney | | Lymphoma Malignant | |
| | | Nephropathy | Minimal |
| * Larynx | | Lymphoma Malignant | |
| * Liver | | Lymphoma Malignant | |
| | [Lymphoma Malignant TGLs = 13-7] | | |
| * Lung | | Lymphoma Malignant | |
| | [Lymphoma Malignant TGLs = 3-5+6] | | |
| Lymph Node | | Pancreatic | Lymphoma Malignant |
| | | Axillary | Lymphoma Malignant |
| | | Deep Cervical | Lymphoma Malignant |
| | | Popliteal | Lymphoma Malignant |
| | [Lymphoma Malignant TGLs = 4,5-19+20] | | |
| | [Lymphoma Malignant TGLs = 6,7-21+22] | | |
| | [Lymphoma Malignant TGLs = 14-23] | | |
| * Lymph Node, Mandibular | | Lymphoma Malignant | |
| | [Lymphoma Malignant TGLs = 1-17] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 729

TRT#: 8

SEX: Female

DAY ON TEST: 558

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62789

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|--|--------------------------------------|----------------------|-------------------|
| * Lymph Node, Mediastinal [Lymphoma Malignant TGLs = 2-4] | | Lymphoma Malignant | |
| * Lymph Node, Mesenteric | | Lymphoma Malignant | |
| * Nose | Olfactory Epi | Hemorrhage | Minimal |
| | | Lymphoma Malignant | |
| * Ovary | | Lymphoma Malignant | |
| * Pancreas | | Lymphoma Malignant | |
| Skeletal Muscle [Lipoma TGLs = 15-18] | | Lipoma | |
| * Spleen [Lymphoma Malignant TGLs = 11,12-16] | | Lymphoma Malignant | |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |
| | Cervix | Hypertrophy | Stromal, Moderate |
| | | Lymphoma Malignant | |
| | [Hypertrophy TGLs = 8-9] | | |
| Vagina | | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 9-18] | | |

PRIMARY CAUSE OF DEATH - Spleen Lymphoma Malignant
 CONTRIBUTORY CAUSE OF DEATH - Vagina Schwannoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 730

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62790

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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 | * Lymph Node, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|------------------------------------|----------------------------------|----------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Larynx | | Foreign Body | Mild |
| | | Inflammation | Mild |
| * Liver | | Clear Cell Focus | |
| | | Hematopoietic Cell Proliferation | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Moderate |
| | | Mixed Cell Focus | |
| * Lung | | Fibrosis | Moderate |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Moderate |
| | | Inflammation | Chronic, Moderate |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16+17+18] | | |
| * Nose | | Accumulation, Hyaline Droplet | Mild |
| | Olfactory Epi | | |
| | Respirat Epith | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Hyperplasia | Marked |
| | [Hyperplasia TGLs = 3-9] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 730

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62790

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|---------------------|--------------------------------------|-----------------------|--------------------|
| * Pancreas | Acinus | Hyperplasia | Mild |
| * Parathyroid Gland | | Fibrosis | Minimal |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| * Spleen | Red Pulp | Infiltration Cellular | Histiocyte, Marked |
| | [Infiltration Cellular TGLs = 2-7] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 731

TRT#: 8

SEX: Female

DAY ON TEST: 590

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62791

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 | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|---|---------------|-------------------------------|---------------------|
| * Kidney | | Nephropathy | Mild |
| * Larynx | Squam Epithel | Hyperplasia | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | |
| | | Fatty Change | Minimal |
| | | Hemangiosarcoma | |
| [Hemangiosarcoma TGLs = 4-16] | | | |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| [Infiltration Cellular TGLs = 3-5+6] | | | |
| * Mammary Gland | | Fibroadenoma | Multiple |
| [Fibroadenoma TGLs = 1,2-18+19+20] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Thymus | | Atrophy | Marked |

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 732

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62792

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Adenoma | |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pituitary Gland | | Angiectasis | Minimal |
| | Pars Distalis | Hyperplasia | Minimal |
| | [Angiectasis TGLs = 3-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 732

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62792

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Minimal

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 733

TRT#: 8

SEX: Female

DAY ON TEST: 690

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62793

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | Peripheral Nerve |
| * Salivary Glands | Skeletal Muscle | * Skin | Spinal Cord |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

* Lymph Node, Bronchial Vagina

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Brain | Hypothalamus | Compression | Marked |
| * Harderian Gland | | Atrophy | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Pituitary Gland | Pars Distalis | Adenoma | |
| | [Adenoma TGLs = 4-10] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | Bilateral, C Cell | Adenoma | |

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 734

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62794

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| Blood Vessel | * 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, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | Vagina |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------------|---------------------------|--------------------|------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| [Cyst TGLs = 1-9] | | | |
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| [Eosinophilic Focus TGLs = 2-16] | | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| [Inflammation TGLs = 3-5+6] | | | |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 735

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62795

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Pancreas |
| * Parathyroid Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

Vagina

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 5-5+6] | | |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 3-9] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Adenocarcinoma | |
| | Endometrium | Hyperplasia | Cystic, Moderate |
| | [Adenocarcinoma TGLs = 1,2,4-10+16] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 736

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62796

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | Vagina | | |

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Mild |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hepatocellular Adenoma | |
| | [Eosinophilic Focus TGLs = 3-7] | Hypertrophy | Mild |
| | [Hepatocellular Adenoma TGLs = 2-7] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 737

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62797

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

MISSING

* Thymus

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Mild |
| | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | | Hepatocellular Adenoma | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Hepatocellular Adenoma TGLs = 2-7] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 738

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62798

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|-----------------------------|-----------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Hyperplasia | Cystic, Mild |
| | [Hyperplasia TGLs = 1-16] | | |
| * Pituitary Gland | | Angiectasis | Minimal |
| | Pars Distalis | Hyperplasia | Mild |
| | [Angiectasis TGLs = 3-10] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 738

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62798

ORGAN AND ACCOUNTABLE SITE STATUS

* Uterus

Endometrium

Hyperplasia
Inflammation
Polyp Stromal

Cystic, Moderate
Suppurative, Mild

[Polyp Stromal TGLs = 2-10]

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 739

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62799

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Clear Cell Focus | |
| | | Cyst | |
| | | Fatty Change | Minimal |
| | Bile Duct | Hepatocellular Adenoma | |
| | | Hyperplasia | Minimal |
| | | Mixed Cell Focus | |
| | [Cyst TGLs = 4-16] | | |
| | [Hepatocellular Adenoma TGLs = 3-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-17] | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 739

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62799

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|-------------------|---------------|----------------------------------|---------|
| * Pituitary Gland | Pars Distalis | Hyperplasia | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 740

TRT#: 8

SEX: Female

DAY ON TEST: 599

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62800

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|---------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Esophagus | * Eye | * Harderian Gland |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Islets, Pancreatic | * Larynx | * Lymph Node, Bronchial |
| * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Mammary Gland | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| * Uterus | Vagina | | |

OBSERVATIONS

| | | | |
|------------------------------|---------------------|----------------------------------|---------------------|
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Cyst | Mild |
| * Heart | | Cardiomyopathy | Minimal |
| * Intestine Small, Jejunum | Artery | Inflammation | Mild |
| [Inflammation TGLs = 3-16] | Artery | Inflammation | Marked |
| * Kidney | Artery | Inflammation | Moderate |
| | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| * Lung | Artery, Mediastinum | Inflammation | Chronic, Marked |
| | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | Artery, Mediastinum | Necrosis | Fibrinoid, Moderate |
| [Inflammation TGLs = 2-17] | Artery | Inflammation | Marked |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Ovary | | Cyst | Mild |
| [Cyst TGLs = 4-9] | | | |
| * Spleen | Capsule | Fibrosis | Minimal |
| | | Hematopoietic Cell Proliferation | Minimal |
| [Fibrosis TGLs = 1-7] | | | |
| * Thymus | | Atrophy | Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 740

TRT#: 8

SEX: Female

DAY ON TEST: 599

DOSE: 1000 ppm

DISP: Natural Death

HISTO: 62800

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Moderate

PRIMARY CAUSE OF DEATH - Intestine Small, Jejunum Artery Inflammation

CONTRIBUTORY CAUSE OF DEATH - Lymph Node, Mesenteric Artery Inflammation

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 741

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62801

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * 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, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Ovary | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Trachea | * Urinary Bladder |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Angiectasis | Minimal |
| | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | | Ultimobranchial Cyst | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Moderate |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 742

TRT#: 8

SEX: Female

DAY ON TEST: 646

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62802

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Pancreas | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Trachea |
| * Urinary Bladder | | | |

MISSING

| | | |
|-------------------------|---------------------|--------|
| * Lymph Node, Bronchial | * Parathyroid Gland | Vagina |
|-------------------------|---------------------|--------|

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 3-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Mild |
| | [Hematopoietic Cell Proliferation TGLs = 4-7] | | |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |
| | [Adenoma TGLs = 2-4] | | |
| * Uterus | | Polyp Stromal | |
| | | Schwannoma Malignant | |
| | [Schwannoma Malignant TGLs = 1-16+17+18] | | |

PRIMARY CAUSE OF DEATH - Uterus Schwannoma Malignant

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 743

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62803

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|--------------------------|----------------------------|---------------------------|
| * 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, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Larynx | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|--|---------------------------|----------------------------------|---------------------|
| * Adrenal Cortex | | Hypertrophy | Minimal |
| * Intestine Small, Duodenum | | Leiomyoma | |
| [Leiomyoma TGLs = 3-16] | | | |
| * Liver | Centrilobular, Hepatocyte | Clear Cell Focus | |
| | | Hypertrophy | Mild |
| * Lung | | Fibrosis | Minimal |
| | Alveolus | Hemorrhage | Minimal |
| | | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| [Infiltration Cellular TGLs = 1-5+6] | | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | Endometrium | Adenocarcinoma | |
| | | Hyperplasia | Cystic, Mild |
| [Adenocarcinoma TGLs = 2-10] | | | |

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 744

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62804

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Trachea |
| * Urinary Bladder | Vagina | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| * Adrenal Medulla | | Hyperplasia | Marked |
| * Harderian Gland | | Hyperplasia | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 3,4,7-7+16+17] | | |
| * Lung | | Hemorrhage | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | [Infiltration Cellular TGLs = 2-6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18] | | |
| * Ovary | | Cyst | Mild |
| | [Cyst TGLs = 5-9] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 744

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62804

ORGAN AND ACCOUNTABLE SITE STATUS

* Thyroid Gland

C Cell

Hyperplasia

Mild

* Uterus

Endometrium

Adenocarcinoma

Hyperplasia

Cystic, Minimal

Polyp Stromal

[Adenocarcinoma TGLs = 6-10]

[Polyp Stromal TGLs = 8-10]

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 745

TRT#: 8

SEX: Female

DAY ON TEST: 530

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62805

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary |
| * Pancreas | * Parathyroid Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | Vagina | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|------------------------------------|---------------------------|-------------------------------|---------------------|
| * Adrenal Cortex | | Necrosis | Mild |
| * Adrenal Medulla | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Cyst | |
| | | Nephropathy | Minimal |
| [Cyst TGLs = 6-8] | | | |
| * Liver | | Clear Cell Focus | |
| | Bile Duct | Cyst | Multiple |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Minimal |
| [Cyst TGLs = 3,4,5-7+16] | | | |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| [Fibroadenoma TGLs = 1-17+18+19] | | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Mild |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Thymus | | Atrophy | Marked |
| * Uterus | | Adenocarcinoma | |
| [Adenocarcinoma TGLs = 7-10] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 745

TRT#: 8

SEX: Female

DAY ON TEST: 530

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62805

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 746

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62806

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| Blood Vessel | * Bone | * Bone Marrow | * Brain |
| * Esophagus | * Eye | * 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 | * Ovary | * Pancreas |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|--------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Mild |
| * Clitoral Gland | | Inflammation | Minimal |
| * Harderian Gland | | Hyperplasia | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Adenoma | |
| | | Nephropathy | Mild |
| | [Adenoma TGLs = 6-8] | | |
| * Liver | | Angiectasis | Minimal |
| | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Cyst | Multiple |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Clear Cell Focus TGLs = 3-7+16+17+18] | | |
| | [Cyst TGLs = 1,2,4-16+17+18] | | |
| | [Eosinophilic Focus TGLs = 5-7] | | |
| * Lung | | Inflammation | Chronic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 746

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62806

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|---------------------|---------------|----------------------------------|-------------------|
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Parathyroid Gland | | Fibrosis | Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Moderate |
| * Uterus | | Polyp Stromal | |
| Vagina | | Inflammation | Suppurative, Mild |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 747

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62807

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Parathyroid Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Minimal |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Larynx | | Inflammation | Minimal |
| * Liver | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | [Eosinophilic Focus TGLs = 4-7] | | |
| * Lung | | Fibrosis | Mild |
| | | Hemorrhage | Mild |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Mild |
| | [Infiltration Cellular TGLs = 2-5+6] | | |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-16] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| * Pancreas | Acinus | Adenoma | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
p-Chloro-a,a,a-trifluorotoluene
CAS Number: 98-56-6

Date Report Requested: 05/16/2016
Time Report Requested: 11:06:30
First Dose M/F: 01/17/11 / 01/17/11
Lab: BNW

ANIMAL ID: 747

TRT#: 8

SEX: Female

DAY ON TEST: 731

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62807

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|--|---------------|-------------|--------|
| * Pituitary Gland [Hyperplasia TGLs = 3-10] | Pars Distalis | Hyperplasia | Mild |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Adenoma | |

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 748

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62808

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Lymph Node, Bronchial

OBSERVATIONS

| | | | |
|-------------------|--|-------------------------------|---------------------|
| * Adrenal Cortex | | Degeneration | Cystic, Mild |
| | | Hypertrophy | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| | | Pheochromocytoma Benign | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Eosinophilic Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| * Lung | | Hemorrhage | Minimal |
| | Alveolar Epith | Hyperplasia | Minimal |
| | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |
| | | Metaplasia | Osseous, Minimal |
| | [Infiltration Cellular TGLs = 1-5+6] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 748

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62808

ORGAN AND ACCOUNTABLE SITE STATUS

* Spleen

Hematopoietic Cell Proliferation

Minimal

* Thymus

Atrophy

Moderate

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 749

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 1000 ppm

DISP: Terminal Sacrifice

HISTO: 62809

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| Blood Vessel | * 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, Mandibular | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|---------------------|---------------------------------|----------------------------------|------------------|
| * Adrenal Cortex | | Hyperplasia | Minimal |
| * Adrenal Medulla | | Hyperplasia | Minimal |
| * Clitoral Gland | | Inflammation | Minimal |
| * Kidney | | Nephropathy | Mild |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | Bile Duct | Hyperplasia | Minimal |
| | Centrilobular, Hepatocyte | Hypertrophy | Mild |
| | | Mixed Cell Focus | |
| | [Mixed Cell Focus TGLs = 2-7] | | |
| * Lung | | Fibrosis | Minimal |
| | | Hemorrhage | Minimal |
| | | Inflammation | Chronic, Minimal |
| * Pancreas | Artery | Inflammation | Minimal |
| * Parathyroid Gland | | Fibrosis | Mild |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Mild |
| | [Hyperplasia TGLs = 1-4] | | |
| * Uterus | Endometrium | Hyperplasia | Cystic, Minimal |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
 Test Type: CHRONIC
 Route: RESPIRATORY EXPOSURE WHOLE BODY
 Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 p-Chloro-a,a,a-trifluorotoluene
 CAS Number: 98-56-6

Date Report Requested: 05/16/2016
 Time Report Requested: 11:06:30
 First Dose M/F: 01/17/11 / 01/17/11
 Lab: BNW

ANIMAL ID: 750

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62810

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | Blood Vessel | * 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, Bronchial | * Lymph Node, Mandibular |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Ovary | * Pancreas |
| * Pituitary Gland | * Salivary Glands | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | Vagina | |

OBSERVATIONS

| | | | |
|---------------------|--|----------------------------------|------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Clear Cell Focus | |
| | Centrilobular, Hepatocyte | Eosinophilic Focus | |
| | | Hypertrophy | Minimal |
| | [Mixed Cell Focus TGLs = 4-16] | Mixed Cell Focus | |
| * Lung | | Fibrosis | Minimal |
| | [Inflammation TGLs = 3-5+6] | Inflammation | Chronic, Minimal |
| * Mammary Gland | | Fibroadenoma | |
| | [Fibroadenoma TGLs = 1-18+19+20+21+22] | | |
| * Nose | Olfactory Epi | Accumulation, Hyaline Droplet | Minimal |
| | | Foreign Body | Minimal |
| * Parathyroid Gland | | Hyperplasia | Moderate |
| * Skin | | Squamous Cell Papilloma | |
| | [Squamous Cell Papilloma TGLs = 2-17] | | |
| * Spleen | | Hematopoietic Cell Proliferation | Minimal |
| * Thymus | | Atrophy | Marked |
| * Thyroid Gland | C Cell | Hyperplasia | Moderate |
| * Uterus | | Polyp Stromal | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 10472 - 03
Test Type: CHRONIC
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

p-Chloro-a,a,a-trifluorotoluene

CAS Number: 98-56-6

Date Report Requested: 05/16/2016

Time Report Requested: 11:06:30

First Dose M/F: 01/17/11 / 01/17/11

Lab: BNW

ANIMAL ID: 750

TRT#: 8

SEX: Female

DAY ON TEST: 674

DOSE: 1000 ppm

DISP: Moribund Sacrifice

HISTO: 62810

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

*** END OF REPORT ***