

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

C Number: C55276

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Male

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_001

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Focal Cellular Change
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
	Cornea	Inflammation, Chronic Focal
Harderian gland	Hardarian Gland	Inflammation, Chronic
	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
		Neoplastic Nodule
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_002

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hematopoiesis
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Squamous Cell Carcinoma, Metastatic
Lymph node	Mandibular Lymph Node	Histiocytosis
	Mandibular Lymph Node	Lymphangiectasis
Pancreas	Acinus	Atrophy, Focal
Prostate		Inflammation, Chronic Focal
Seminal vesicle		Inflammation, Chronic Focal
Skin	Back	Squamous Cell Carcinoma
Spleen	Red Pulp	Hematopoiesis
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Follicular-Cell Adenoma
Unspecified	Axilla	Lipoma
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_003

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Spleen

Red Pulp

Hematopoiesis

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_004

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Lymph node

Mammary gland

Oral mucosa

Pituitary gland

Skin

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Mandibular Lymph Node

Mammary Acinus

Palate Nos

Anterior Pituitary

Lip Nos

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Histiocytosis

Hyperplasia, Cystic

Squamous Cell Papilloma

Adenoma, Nos

Cyst, Embryonal Duct

Squamous Cell Papilloma

Interstitial-Cell Tumor

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_005

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney

Cortex Nos
Harderian Gland
Myocardium Nos

Cytoplasmic Vacuolization
Tissue Examined
Degeneration, Nos
Inflammation, Acute/Chronic
Nephropathy
Hyperplasia, Focal
Inflammation, Suppurative
Squamous Cell Carcinoma, Metastatic
Dilatation, Nos
Squamous Cell Papilloma
Interstitial-Cell Tumor
Inflammation, Suppurative
Dilatation, Ducts
Tissue Examined

Liver
Lung

Bile Duct

Mammary gland
Skin
Testis
Unspecified
Zymbal gland

Mammary Acinus
Lip Nos

Mediastinum Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_006

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Degeneration, Cystic

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Acute/Chronic

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Pituitary gland

Hyperplasia, Focal

Stomach

Cardiac Stomach

Acanthosis

Testis

Cardiac Stomach

Hyperkeratosis

Hyperplasia, Interstitial Cell

Thyroid

Hypospermatogenesis

Zymbal gland

Cyst, Follicular Nos

Carcinoma, Nos

Dilatation, Ducts

Hyperplasia, Epithelial

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_007

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Hyperplasia, Focal

Heart

Hardarian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Periportal

Nephropathy

Stomach

Bile Duct

Cytoplasmic Vacuolization

Testis

Cardiac Stomach

Hyperplasia, Nos

Thymus

Cardiac Stomach

Hyperkeratosis

Unspecified

Cortex

Hyperplasia, Interstitial Cell

Zymbal gland

Abdominal Cavity

Interstitial-Cell Tumor

Depletion, Lymphoid

Fibrosarcoma

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_008

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Pancreas	Acinus	Atrophy, Focal
Testis		Interstitial-Cell Tumor
Thymus		Cyst, Embryonal Duct
		Depletion, Lymphoid
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_009

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Bone marrow		Fibrosis, Myelo
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Pericardium Nos	Inflammation, Acute Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Cyst, Nos
Skin	Back	Squamous Cell Carcinoma
	Foot And Toe Nos	Squamous Cell Papilloma
Testis	Tubule	Degeneration, Nos
		Hyperplasia, Interstitial Cell
Trachea	Peritracheal Tissue	Inflammation, Acute Focal
Unspecified	Mediastinum Nos	Inflammation, Acute Focal
	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_010

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal Pheochromocytoma
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
Mammary gland		Hyperplasia, Cystic
Pituitary gland	Pituitary Cell	Hyperplasia, Nos
Salivary gland		Carcinoma, Nos, Uncertain Primary Or Metastatic
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Hematopoiesis
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_011

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
	Zona Fasciculata	Hematopoiesis
Harderian gland	Hardarian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Hyperplasia, Alveolar Epithelium
Mammary gland	Mammary Acinus	Hyperplasia, Focal
Spleen	Red Pulp	Hematopoiesis
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland	Tunica Vaginalis	Mesothelioma, Nos
		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_012

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Zona Fasciculata

Cytoplasmic Vacuolization

Eye

Crystalline Lens

Cataract

Retina

Degeneration, Nos

Harderian gland

Hardarian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Aspiration, Foreign Body

Spleen

Follicles

Depletion, Lymphoid

Testis

Hyperplasia, Interstitial Cell

Zymbal gland

Carcinoma, Nos

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_013

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver
Lung
Lymph node
Salivary gland

Skin
Spleen
Testis

Thyroid
Zymbal gland

Zona Reticularis
Harderian Gland
Myocardium Nos

Bile Duct

Mandibular Lymph Node

Lip Nos
Follicles
Tubule

Hematopoiesis
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Squamous Cell Carcinoma, Metastatic
Squamous Cell Carcinoma, Metastatic
Atrophy, Diffuse
Inflammation, Active Chronic
Squamous Cell Carcinoma
Depletion, Lymphoid
Degeneration, Nos
Interstitial-Cell Tumor
Cyst, Follicular Nos
Dilatation, Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_014

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Atrophy, Diffuse
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pancreas	Islets	Islet-Cell Carcinoma
Salivary gland		Squamous Cell Carcinoma, Invasive
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Pigmentation, Nos
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Tongue		Squamous Cell Carcinoma
Unspecified	Neck	Squamous Cell Carcinoma, Metastatic
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_015

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Skin

Thorax

Trichoepithelioma

Stomach

Cardiac Stomach

Ulcer, Acute

Testis

Hyperplasia, Interstitial Cell

Thyroid

Hyperplasia, Follicular Cell

Zymbal gland

Dilatation, Ducts

Hyperplasia, Epithelial

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_016

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Seminal vesicle

Hyperplasia, Focal

Skin

Abdomen

Squamous Cell Papilloma

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_017

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Spleen

Follicles

Depletion, Lymphoid

Stomach

Cardiac Stomach

Acanthosis

Cardiac Stomach

Hyperkeratosis

Cardiac Stomach

Ulcer, Acute

Testis

Hyperplasia, Interstitial Cell

Zymbal gland

Carcinoma, Nos

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_018

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Blood vessel	Central Veins	Thrombus, Organized
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Hardarian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Stomach	Fundus	Ulcer, Acute
Testis		Hyperplasia, Interstitial Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_019

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Acute Focal

Mammary gland

Hyperplasia, Cystic

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Spleen

Follicles

Depletion, Lymphoid

Stomach

Cardiac Stomach

Acanthosis

Thymus

Cardiac Stomach

Hyperkeratosis

Thyroid

Depletion, Lymphoid

Zymbal gland

Hyperplasia, C Cell

Carcinoma, Nos

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_020

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver
Mammary gland
Spleen
Testis

Unspecified
Zymbal gland

Zona Reticularis
Harderian Gland
Myocardium Nos

Bile Duct
Mammary Acinus
Follicles
Tubule

Ear

Hematopoiesis
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Hyperplasia, Cystic
Depletion, Lymphoid
Degeneration, Nos
Interstitial-Cell Tumor
Fibrosarcoma
Carcinoma, Nos
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_021

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Lymph node

Mandibular Lymph Node

Plasmacytosis

Tongue

Abscess, Chronic

Squamous Cell Papilloma

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_022

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Blood	Marrow Erythrocytes	Atrophy, Focal
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Skin	Foot And Toe Nos	Squamous Cell Papilloma
	Lip Nos	Squamous Cell Papilloma
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Tongue		Squamous Cell Papilloma
Zymbal gland		Carcinoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_023

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Acute Focal
Lymph node	Mandibular Lymph Node	Inflammation, Granulomatous Focal
Pituitary gland		Adenoma, Nos
Testis		Interstitial-Cell Tumor
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_024

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Pituitary gland

Stomach

Unspecified

Zymbal gland

Harderian Gland

Myocardium Nos

Cardiac Stomach

Cardiac Stomach

Multiple Organs Nos

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Adenoma, Nos

Acanthosis

Hyperkeratosis

Leukemia, Mononuclear Cell

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_025

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Metamorphosis, Fatty
Brain	Meninges	Inflammation, Acute Focal
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Hyperplasia, Alveolar Epithelium
Oral mucosa	Palate Nos	Acanthosis
	Palate Nos	Hyperkeratosis
Pancreas	Acinus	Atrophy, Diffuse
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thymus		Cyst, Embryonal Duct
Thyroid		Cyst, Follicular Nos
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_026

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Blood vessel	Central Veins	Thrombus, Organized
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Brachial Lymph Node	Histiocytosis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Salivary gland		Inflammation, Acute Focal
Skin	Eyelid Nos	Squamous Cell Carcinoma
	Face	Squamous Cell Carcinoma
	Lip Nos	Squamous Cell Papilloma
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Thymus		Depletion, Lymphoid
Unspecified	Ear	Fibrosarcoma
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_027

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Oral mucosa	Palate Nos	Squamous Cell Papilloma
Skin	Head	Undifferentiated Carcinoma
Spleen	Follicles	Depletion, Lymphoid
Stomach	Fundus	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Neck	Inflammation, Suppurative
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_028

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Necrosis, Focal
Epididymis		Inflammation, Acute Focal
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Inflammation, Acute Necrotizing
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
	Hepatocytes	Necrosis, Central
Lymph node	Mandibular Lymph Node	Histiocytosis
Pancreas	Acinus	Atrophy, Focal
	Islets	Hyperplasia, Focal
Skin	Back	Squamous Cell Carcinoma
Spleen	Red Pulp	Hematopoiesis
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
Testis		Inflammation, Acute Focal
		Interstitial-Cell Tumor
Unspecified	Adipose Tissue	Hemorrhage
	Mediastinum Nos	Inflammation, Acute Necrotizing
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_029

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Reticularis	Hematopoiesis
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Focal
Lung		Alveolar/Bronchiolar Carcinoma
Pancreas	Acinus	Atrophy, Focal
Salivary gland		Atrophy, Focal
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Axilla	Fibroma
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_030

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Medulla
Hardarian Gland
Hardarian Gland
Myocardium Nos

Hyperplasia, Focal
Hyperplasia, Epithelial
Tissue Examined
Degeneration, Nos

Heart
Kidney
Liver

Nephropathy
Hematopoiesis

Oral mucosa
Parathyroid gland

Bile Duct
Palate Nos

Hyperplasia, Focal
Squamous Cell Papilloma
Hyperplasia, Focal

Pituitary gland
Skin

Anterior Pituitary
Foot And Toe Nos

Focal Cellular Change
Squamous Cell Papilloma

Stomach

Fundus

Necrosis, Focal

Testis

Interstitial-Cell Tumor

Thyroid

Hyperplasia, C Cell

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_031

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Liver

Bile Duct

Hyperplasia, Focal

Lung

Congestion, Acute

Testis

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_032

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Lung

Alveoli

Foreign Material, Nos

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Testis

Interstitial-Cell Tumor

Thyroid

Follicular-Cell Adenoma

Unspecified

Multiple Organs Nos

Bacterial Septicemia

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_033

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Skin	Face	Squamous Cell Carcinoma
Spleen	Follicles	Depletion, Lymphoid
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
	Cardiac Stomach	Inflammation, Active Chronic
	Cardiac Stomach	Ulcer, Chronic
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_034

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Spleen

Follicles

Depletion, Lymphoid

Stomach

Cardiac Stomach

Acanthosis

Cardiac Stomach

Erosion

Testis

Interstitial-Cell Tumor

Thymus

Depletion, Lymphoid

Tongue

Squamous Cell Carcinoma

Unspecified

Mediastinum Nos

Inflammation, Acute Focal

Abdomen

Inflammation, Chronic Focal

Zymbal gland

Carcinoma, Nos

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_035

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain	Meninges	Carcinoma, Nos, Metastatic Hemorrhage
Harderian gland	Hardarian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Carcinoma, Nos, Metastatic
Pituitary gland		Adenoma, Nos
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Hyperplasia, Interstitial Cell
Thymus	Cortex	Depletion, Lymphoid
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_036

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Intestine Small

Kidney

Liver

Skin

Spleen

Thyroid

Zymbal gland

Harderian Gland

Submucosa, Jejunum

Hepatocytes

Bile Duct

Face

Follicles

Pheochromocytoma

Tissue Examined

Inflammation, Chronic Focal

Nephropathy

Cytoplasmic Vacuolization

Hyperplasia, Focal

Squamous Cell Carcinoma

Depletion, Lymphoid

Cyst, Follicular Nos

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_037

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Reticularis	Hematopoiesis
Harderian gland	Hardarian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Hematopoiesis
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Tongue		Squamous Cell Carcinoma
Unspecified	Groin	Fibroma
	Neck	Squamous Cell Carcinoma, Invasive
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_038

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Angiectasis
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung		Inflammation, Acute Diffuse
Lymph node	Renal Lymph Node	Inflammation, Chronic Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Salivary gland		Atrophy, Focal
Skin	Face	Squamous Cell Carcinoma
Spleen	Follicles	Depletion, Lymphoid
Testis		Hyperplasia, Interstitial Cell
Thymus		Depletion, Lymphoid
Zymbal gland		Adenoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_039

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Lung

Alveoli

Congestion, Nos

Alveoli

Foreign Material, Nos

Alveoli

Hemorrhage

Spleen

Follicles

Depletion, Lymphoid

Trachea

Peritracheal Tissue

Inflammation, Acute Focal

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_040

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Mammary gland

Cyst, Multiple

Oral mucosa

Mammary Acinus

Hyperplasia, Cystic

Pituitary gland

Palate Nos

Squamous Cell Papilloma

Skin

Adenoma, Nos

Spleen

Lip Nos

Squamous Cell Carcinoma

Testis

Follicles

Depletion, Lymphoid

Thyroid

Hyperplasia, Interstitial Cell

Zymbal gland

Hyperplasia, C Cell

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_041

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Pancreas

Islets

Islet-Cell Carcinoma

Skin

Lip Nos

Squamous Cell Carcinoma

Spleen

Follicles

Depletion, Lymphoid

Testis

Tubule

Degeneration, Nos

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Zymbal gland

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_042

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Reticularis	Hematopoiesis
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
	Centrilobular	Necrosis, Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pancreas	Acinus	Atrophy, Focal
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_043

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata Zona Fasciculata	Hyperplasia, Focal Necrosis, Focal
Bone marrow		Hypoplasia, Hematopoietic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Lung	Alveoli	Hemorrhage
Lymph node	Mandibular Lymph Node	Embolus, Septic
Pituitary gland		Adenoma, Nos
Skin	Lip Nos	Inflammation, Acute Focal
Testis	Tubule Interstitialium	Degeneration, Nos Hemorrhage
Thymus		Interstitial-Cell Tumor
Zymbal gland		Depletion, Lymphoid Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_044

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Granulocytic
Brain	Meninges	Inflammation, Acute Focal
Harderian gland	Harderian Gland	Tissue Examined
Kidney	Tubule	Bacterial Septicemia Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Carcinoma, Nos, Metastatic
Lymph node	Mesenteric Lymph Node	Inflammation, Granulomatous Focal
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Spleen	Follicles	Depletion, Lymphoid
Testis		Interstitial-Cell Tumor
Thymus		Depletion, Lymphoid
Thyroid		Follicular-Cell Carcinoma
Unspecified	Mediastinum Nos	Inflammation, Acute Diffuse
Zymbal gland		Carcinoma, Nos Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_045

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Squamous Cell Carcinoma, Metastatic

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Skin

Back

Squamous Cell Carcinoma

Foot And Toe Nos

Squamous Cell Papilloma

Lip Nos

Squamous Cell Papilloma

Spleen

Follicles

Depletion, Lymphoid

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Unspecified

Axilla

Fibroma

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_046

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Intestine Large

Colon

Parasitism

Kidney

Nephropathy

Lung

Alveoli

Foreign Material, Nos

Testis

Hyperplasia, Interstitial Cell

Thyroid

Interstitial-Cell Tumor

Unspecified

Groin

Hyperplasia, Cystic

Zymbal gland

Fibroma

Dilatation, Ducts

Hyperplasia, Epithelial

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_047

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Kidney
Liver
Spleen
Testis
Thymus
Unspecified
Zymbal gland

Cortex Nos
Hardarian Gland

Bile Duct
Follicles

Neck

Metamorphosis, Fatty
Tissue Examined
Nephropathy
Hyperplasia, Focal
Depletion, Lymphoid
Hyperplasia, Interstitial Cell
Depletion, Lymphoid
Fibrosarcoma
Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_048

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Hyperplasia, Epithelial

Heart

Hardarian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Nephropathy

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Spleen

Follicles

Hyperplasia, Focal

Testis

Depletion, Lymphoid

Thyroid

Hyperplasia, Interstitial Cell

Zymbal gland

Hyperplasia, C Cell

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_049

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Tubule

Pigmentation, Nos

Lymph node

Mandibular Lymph Node

Histiocytosis

Tongue

Squamous Cell Carcinoma

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1_050

TRT#: 1

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Bone marrow		Hyperplasia, Granulocytic
Eye	Cornea	Hyperplasia, Epithelial
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Acute Focal
	Centrilobular	Thrombosis, Nos
Lymph node	Mandibular Lymph Node	Histiocytosis
Oral mucosa	Palate Nos	Squamous Cell Papilloma
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_001

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Mineralization

Kidney

Tubular Basement Membrane

Mineralization

Spleen

Follicles

Depletion, Lymphoid

Stomach

Mucosa

Mineralization

Tongue

Mucosa

Ulcer, Acute

Zymbal gland

Squamous Cell Carcinoma

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_002

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal Pheochromocytoma
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pancreas	Acinus	Atrophy, Focal
Parathyroid gland		Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
	Pituitary Cell	Cytoplasmic Vacuolization
Testis	Tubule	Degeneration, Nos Inflammation, Active Chronic
Thyroid		Hyperplasia, Follicular Cell
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_003

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
	Zona Fasciculata	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Hyperplasia, Nos
	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Mammary gland	Mammary Acinus	Hyperplasia, Focal
Pituitary gland	Anterior Pituitary	Congestion, Nos
	Pituitary Cell	Focal Cellular Change
	Pituitary Cell	Hyperplasia, Diffuse
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Carcinoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_004

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Inflammation, Chronic

Lung

Hardarian Gland

Tissue Examined

Thymus

Foreign Material, Nos

Tongue

Hemorrhage

Zymbal gland

Squamous Cell Carcinoma

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_005

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal Pheochromocytoma
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Hardarian Gland	Inflammation, Chronic
	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Cyst, Multiple
	Mandibular Lymph Node	Histiocytosis
	Thymic Lymph Node	Histiocytosis
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Preputial gland		Carcinoma, Nos
Testis		Hyperplasia, Interstitial Cell Interstitial-Cell Tumor
Thymus		Depletion, Lymphoid
Thyroid		Cyst, Follicular Nos
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_006

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Congestion, Nos
	Neck	Fibrosarcoma
Urinary bladder	Submucosa	Inflammation, Chronic Focal
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_007

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cytoplasmic Vacuolization Pheochromocytoma
Harderian gland	Hardarian Gland	Tissue Not Examined
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland		Galactocele
Pituitary gland		Adenoma, Nos
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_008

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Inflammation, Chronic

Heart

Hardarian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Lung

Nephropathy

Pancreas

Acinus

Foreign Material, Nos

Thyroid

Pneumonia, Interstitial Chronic

Zymbal gland

Atrophy, Focal

Hyperplasia, C Cell

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_009

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Focal Pheochromocytoma
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pancreas	Acinus	Atrophy, Focal
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_010

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Atrophy, Nos

Heart

Harderian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Hepatocytes

Nephropathy

Lung

Bile Duct

Cytoplasmic Vacuolization

Preputial gland

Hyperplasia, Focal

Stomach

Cardiac Stomach

Squamous Cell Carcinoma

Testis

Cardiac Stomach

Cyst, Nos

Thyroid

Cardiac Stomach

Acanthosis

Zymbal gland

Cardiac Stomach

Hyperkeratosis

Ulcer, Acute

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Hyperplasia, C Cell

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_011

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Kidney

Nephropathy

Liver

Periportal

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Thrombosis, Nos

Lung

Congestion, Acute

Spleen

Follicles

Depletion, Lymphoid

Stomach

Cardiac Stomach

Acanthosis

Tongue

Cardiac Stomach

Hyperkeratosis

Zymbal gland

Squamous Cell Carcinoma

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_012

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal Pheochromocytoma
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Periportal	Cytoplasmic Vacuolization
Lung		Squamous Cell Carcinoma, Metastatic
Lymph node	Thymic Lymph Node	Angiectasis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Oral mucosa	Palate Nos	Squamous Cell Papilloma
Pancreas	Acinus	Atrophy, Focal
Skin		Squamous Cell Carcinoma
Spleen		Hemangiosarcoma
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_013

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Medulla
Harderian Gland
Harderian Gland
Myocardium Nos

Heart
Kidney
Liver

Hepatocytes
Bile Duct
Acinus

Pancreas
Pituitary gland
Testis

Tubule

Zymbal gland

Hyperplasia, Focal
Inflammation, Chronic
Tissue Examined
Degeneration, Nos
Nephropathy
Cytoplasmic Vacuolization
Hyperplasia, Focal
Hyperplasia, Nos
Adenoma, Nos
Degeneration, Nos
Interstitial-Cell Tumor
Dilatation, Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_014

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Hyperplasia, Nos

Heart

Harderian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Hepatocytes

Nephropathy

Bile Duct

Cytoplasmic Vacuolization

Mammary gland

Mammary Acinus

Hyperplasia, Focal

Pancreas

Thrombosis, Nos

Acinus

Hyperplasia, Cystic

Pituitary gland

Anterior Pituitary

Acinar-Cell Adenoma

Pituitary Cell

Atrophy, Focal

Stomach

Fundus

Cyst, Hemorrhagic

Testis

Tubule

Hyperplasia, Focal

Necrosis, Focal

Degeneration, Nos

Thyroid

Zymbal gland

Interstitial-Cell Tumor

C-Cell Adenoma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_015

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Bone	Femur	Osteosclerosis
Brain	Medulla Oblongata Nos	Carcinoma, Nos, Invasive
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Periportal	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Carcinoma, Nos, Metastatic
Oral mucosa	Oral Cavity	Carcinoma, Nos, Invasive
Pituitary gland		Carcinoma, Nos, Invasive
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Pigmentation, Nos
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
	Cardiac Stomach	Ulcer, Focal
Thymus		Congestion, Nos
		Depletion, Lymphoid
Thyroid		Carcinoma, Nos, Metastatic
Zymbal gland		Carcinoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_016

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Metamorphosis, Fatty Pheochromocytoma
Harderian gland	Hardarian Gland Hardarian Gland	Atrophy, Nos Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Inflammation, Interstitial
Pancreas	Acinus	Hyperplasia, Focal
Spleen	Follicles Red Pulp	Depletion, Lymphoid Hematopoiesis
Testis		Interstitial-Cell Tumor
Unspecified	Leg	Osteosarcoma
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_017

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Testis

Interstitial-Cell Tumor

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_018

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Cytoplasmic Vacuolization Hyperplasia, Focal
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Hardarian Gland Hardarian Gland	Inflammation, Chronic Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal Inflammation, Acute Focal
Pituitary gland		Adenoma, Nos
Preputial gland		Squamous Cell Carcinoma
Spleen	Red Pulp	Hematopoiesis
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Cystic Ducts Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_019

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Bone	Femur	Osteosclerosis
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
	Posterior Chamber	Hemorrhage
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Focal
		Neoplastic Nodule
Lymph node	Thymic Lymph Node	Hemangiosarcoma
	Mandibular Lymph Node	Histiocytosis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Oral mucosa	Palate Nos	Acanthosis
	Palate Nos	Hyperkeratosis
Pituitary gland		Adenoma, Nos
Prostate		Inflammation, Active Chronic
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
		Cyst, Follicular Nos
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_020

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Inflammation, Granulomatous Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Pituitary gland	Anterior Pituitary	Cyst, Embryonal Duct
Skin	Lip Nos	Carcinoma, Nos, Invasive
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Multiple Organs Nos	Hyperplasia, Focal
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_021

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone
Harderian gland

Femur
Harderian Gland
Harderian Gland

Heart
Kidney

Myocardium Nos

Liver
Skin
Testis

Bile Duct
Lip Nos
Tubule

Zymbal gland

Osteosclerosis
Hyperplasia, Nos
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Squamous Cell Papilloma
Degeneration, Nos
Interstitial-Cell Tumor
Dilatation, Ducts
Inflammation, Suppurative
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_022

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver

Medulla
Harderian Gland
Myocardium Nos

Hyperplasia, Focal
Tissue Examined
Degeneration, Nos
Nephropathy
Clear-Cell Change
Cytoplasmic Change, Basophilic
Hyperplasia, Focal
Depletion, Lymphoid
Degeneration, Nos
Interstitial-Cell Tumor
Dilatation, Ducts
Tissue Examined

Spleen
Testis

Bile Duct
Follicles
Tubule

Zymbal gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_023

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Ear	External Ear	Fibrosarcoma
Harderian gland	Harderian Gland	Inflammation, Chronic
	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lung		Pneumonia, Interstitial Chronic
Pituitary gland		Adenoma, Nos
Stomach	Fundus	Necrosis, Focal
	Cardiac Stomach	Squamous Cell Papilloma
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_024

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
	Zona Fasciculata	Hyperplasia, Focal
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney	Cortex	Metamorphosis, Fatty
		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland		Galactocele
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Spleen	Follicles	Depletion, Lymphoid
Testis		Interstitial-Cell Tumor
Thymus	Medulla	Metaplasia, Squamous
Zymbal gland		Cystic Ducts
		Dilatation, Ducts
		Hyperplasia, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_025

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Bone	Femur	Osteosclerosis
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
		Neoplastic Nodule
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_026

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Zona Fasciculata
Hardarian Gland
Hardarian Gland
Hardarian Gland

Cytoplasmic Vacuolization
Atrophy, Nos
Inflammation, Chronic
Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Pituitary gland

Anterior Pituitary

Cyst, Embryonal Duct

Pituitary Cell

Hyperplasia, Focal

Testis

Tubule

Degeneration, Nos

Thyroid

Interstitial-Cell Tumor

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Zymbal gland

Leukemia, Mononuclear Cell

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_027

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Inflammation, Nos

Heart

Harderian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Nephropathy

Lymph node

Mandibular Lymph Node

Hyperplasia, Focal

Pancreas

Acinus

Histiocytosis

Islets

Atrophy, Focal

Acinus

Hyperplasia, Focal

Preputial gland

Hyperplasia, Nos

Testis

Tubule

Inflammation, Chronic Focal

Thymus

Medulla

Degeneration, Nos

Thyroid

Interstitial-Cell Tumor

Zymbal gland

Hyperplasia, Epithelial

Cyst, Follicular Nos

Cystic Ducts

Dilatation, Ducts

Hyperplasia, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_028

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver
Lymph node
Mammary gland
Salivary gland

Zona Fasciculata
Hardarian Gland
Myocardium Nos

Bile Duct
Mandibular Lymph Node

Skin
Spleen
Stomach
Testis

Shoulder
Follicles
Fundus
Tubule

Thyroid
Zymbal gland

Cytoplasmic Vacuolization
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Histiocytosis
Galactoceles
Atrophy, Diffuse
Inflammation, Active Chronic
Squamous Cell Carcinoma
Depletion, Lymphoid
Necrosis, Focal
Degeneration, Nos
Interstitial-Cell Tumor
Hyperplasia, C Cell
Cystic Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_029

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hematopoiesis

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Granulomatous Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Spleen

Red Pulp

Hematopoiesis

Zymbal gland

Carcinoma, Nos

Cystic Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_030

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization Pheochromocytoma
Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization Inflammation, Granulomatous Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Nasal cavity	Turbinates Nos	Inflammation, Suppurative
Pancreas	Islets	Hyperplasia, Focal
Skin	Face	Squamous Cell Carcinoma
Stomach	Cardiac Stomach	Ulcer, Chronic
Testis		Interstitial-Cell Tumor
Thyroid		C-Cell Carcinoma
Zymbal gland		Dilatation, Ducts Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_031

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Brain	Cerebrum	Hydrocephalus, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Oral mucosa	Palate Nos	Squamous Cell Papilloma
Skin	Back	Sebaceous Adenoma
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Thorax	Fibroma
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_032

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Lymph node

Mandibular Lymph Node

Histiocytosis

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Pancreas

Acinus

Cell-Size Alteration

Skin

Back

Sebaceous Adenoma

Testis

Foot And Toe Nos

Squamous Cell Papilloma

Tubule

Degeneration, Nos

Hemorrhage

Thyroid

Interstitial-Cell Tumor

Unspecified

Multiple Organs Nos

Hyperplasia, C Cell

Zymbal gland

Hyperplasia, Focal

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_033

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Cyst, Hemorrhagic Pheochromocytoma
Eye	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Mammary gland		Cyst, Hemorrhagic
Skin	Foot And Toe Nos	Squamous Cell Papilloma
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
Unspecified	Shoulder	Neurofibrosarcoma
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_034

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
	Zona Reticularis	Hematopoiesis
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Salivary gland		Metaplasia, Squamous
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Thorax	Fibroma
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_035

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Blood vessel	Hepatic Vein	Thrombosis, Nos
Brain	Cerebrum	Atrophy, Pressure
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pituitary gland		Cyst, Embryonal Duct
Skin	Shoulder	Sebaceous Adenoma
Spleen	Follicles	Depletion, Lymphoid
Testis		Interstitial-Cell Tumor
Zymbal gland		Cystic Ducts
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_036

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Bone marrow		Hyperplasia, Hematopoietic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lymph node	Mandibular Lymph Node	Inflammation, Active Chronic
		Inflammation, Active Chronic
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pituitary gland		Adenoma, Nos
Skin	Hip	Squamous Cell Carcinoma
Spleen	Red Pulp	Hematopoiesis
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_037

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Portal Tract	Hematopoiesis
	Bile Duct	Hyperplasia, Focal
Lung	Pleura Nos	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Pituitary gland	Anterior Pituitary	Cytoplasmic Change, Nos
Skin	Sebaceous Gland	Hyperplasia, Focal
	Lip Nos	Squamous Cell Papilloma
Spleen	Follicles	Depletion, Lymphoid
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Unspecified	Adipose Tissue	Inflammation, Granulomatous Focal
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_038

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Brain
Harderian gland

Zona Reticularis
Meninges
Harderian Gland
Harderian Gland
Myocardium Nos

Heart
Kidney
Liver

Hematopoiesis
Granular-Cell Tumor, Benign
Adenoma, Nos
Tissue Examined
Degeneration, Nos
Nephropathy
Cytoplasmic Change, Basophilic

Pancreas
Pituitary gland

Bile Duct
Acinus
Anterior Pituitary
Pituitary Cell

Hyperplasia, Focal
Atrophy, Focal
Cyst, Embryonal Duct
Hyperplasia, Focal
Depletion, Lymphoid
Degeneration, Nos

Spleen
Testis

Follicles
Tubule

Interstitial-Cell Tumor
Dilatation, Ducts
Tissue Examined

Zymbal gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_039

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Liver

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Lung

Bronchus

Inflammation, Acute Focal

Lymph node

Thoracic Lymph Node

Plasmacytosis

Mammary gland

Dilatation, Ducts

Spleen

Follicles

Depletion, Lymphoid

Testis

Hyperplasia, Interstitial Cell

Thymus

Depletion, Lymphoid

Zymbal gland

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_040

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Brain	Meninges	Granular-Cell Tumor, Benign
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_041

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Zona Fasciculata	Hyperplasia, Focal
Bone	Femur	Osteosclerosis
Harderian gland	Harderian Gland	Hyperplasia, Nos
	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney	Pelvis	Hyperplasia, Epithelial
		Nephropathy
Liver		Clear-Cell Change
	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Skin	Flank	Trichoepithelioma
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Adenoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_042

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Esophagus	Periesophageal Tissue	Inflammation, Acute/Chronic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney	Cortex	Nephropathy
Liver	Periportal	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Abscess, Nos
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Pigmentation, Nos
Unspecified	Mediastinum Nos	Inflammation, Acute/Chronic
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_043

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
	Zona Fasciculata	Hyperplasia, Focal
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Oral mucosa	Palate Nos	Squamous Cell Papilloma
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Skin	Flank	Trichoepithelioma
Spleen	Follicles	Depletion, Lymphoid
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
		Hyperplasia, C Cell
Unspecified	Nose	Cyst, Epidermal Inclusion
	Adipose Tissue	Inflammation, Granulomatous Focal
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_044

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Oral mucosa	Palate Nos	Acanthosis
	Palate Nos	Hyperkeratosis
Pancreas	Islets	Islet-Cell Adenoma
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
Thyroid		Hyperplasia, C Cell
Zymbal gland		Dilatation, Ducts
		Hyperplasia, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_045

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Lung

Aspiration, Foreign Body

Inflammation, Acute/Chronic

Testis

Interstitial-Cell Tumor

Thymus

Cortex

Depletion, Lymphoid

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_046

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Acute/Chronic

Zymbal gland

Carcinoma, Nos

Hyperplasia, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_047

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Inflammation, Chronic

Oral mucosa

Hardarian Gland

Tissue Examined

Testis

Palate Nos

Squamous Cell Papilloma

Zymbal gland

Interstitial-Cell Tumor

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_048

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Hyperplasia, Focal Pheochromocytoma
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change Cytoplasmic Change, Basophilic Degeneration, Cystic
	Bile Duct	Hyperplasia, Focal
Pituitary gland		Adenoma, Nos
Prostate		Inflammation, Active Chronic
Testis	Tubule	Degeneration, Nos Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
Zymbal gland	Follicle	Hyperplasia, Cystic Cystic Ducts Dilatation, Ducts Hyperplasia, Nos Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_049

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lung		Inflammation, Granulomatous Focal
Pituitary gland	Anterior Pituitary	Cyst, Embryonal Duct
		Hyperplasia, Focal
Skin	Flank	Squamous Cell Carcinoma
	Flank	Trichoepithelioma
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland		Hyperplasia, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2_050

TRT#: 2

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Focal
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Inflammation, Granulomatous Focal
Peritoneum	Parietal Peritoneum	Inflammation, Chronic Focal
Skin	Lower Leg	Acanthosis
	Lower Leg	Hyperkeratosis
Spleen	Follicles	Depletion, Lymphoid
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
	Tunica Vaginalis	Mesothelioma, Nos
Thyroid	Follicle	Hyperplasia, Cystic
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_001

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Skin

Lip Nos

Fibrosis, Focal

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Unspecified

Multiple Organs Nos

Interstitial-Cell Tumor

Zymbal gland

Leukemia, Mononuclear Cell

Cystic Ducts

Hyperplasia, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_002

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Lung

Congestion, Acute

Spleen

Red Pulp

Pigmentation, Nos

Stomach

Cardiac Stomach

Acanthosis

Testis

Cardiac Stomach

Hyperkeratosis

Tongue

Hyperplasia, Interstitial Cell

Zymbal gland

Squamous Cell Carcinoma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:23

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_003

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Intestine Small

Mesentery Nos

Inflammation, Granulomatous Focal

Kidney

Nephropathy

Lung

Alveoli

Foreign Material, Nos

Spleen

Red Pulp

Congestion, Acute

Testis

Follicles

Depletion, Lymphoid

Thyroid

Capsule

Interstitial-Cell Tumor

Zymbal gland

Inflammation, Acute Focal

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_004

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Reticularis	Hematopoiesis
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Neoplastic Nodule
Lung		Inflammation, Interstitial
Lymph node	Mandibular Lymph Node	Plasmacytosis
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Prostate		Hyperplasia, Focal
Seminal vesicle		Hyperplasia, Cystic
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
Unspecified	Abdomen	Fibroma
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_005

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland
Heart
Kidney

Harderian Gland
Myocardium Nos
Cortex

Tissue Examined
Degeneration, Nos
Cyst, Multiple
Nephropathy

Liver
Lung
Lymph node
Skin

Bile Duct

Mandibular Lymph Node
Eyelid Nos

Hyperplasia, Focal
Inflammation, Interstitial
Histiocytosis
Sebaceous Adenoma
Squamous Cell Papilloma
Degeneration, Nos
Interstitial-Cell Tumor
Carcinoma, Nos
Dilatation, Ducts
Tissue Examined

Testis

Tubule

Zymbal gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_006

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Lymph node

Pancreas

Skin

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Mandibular Lymph Node

Acinus

Foot And Toe Nos

Lip Nos

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Histiocytosis

Atrophy, Focal

Squamous Cell Papilloma

Squamous Cell Papilloma

Interstitial-Cell Tumor

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_007

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain	Hypothalamus Nos	Atrophy, Pressure
Harderian gland	Hardarian Gland	Tissue Examined
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Chronic Focal
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Preputial gland		Inflammation, Chronic
Thymus		Depletion, Lymphoid
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_008

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Not Examined

Liver

Bile Duct

Hyperplasia, Focal

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_009

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Neoplastic Nodule

Centrilobular

Thrombosis, Nos

Prostate

Inflammation, Acute/Chronic

Spleen

Red Pulp

Hematopoiesis

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Thyroid

Interstitial-Cell Tumor

Zymbal gland

Hyperplasia, C Cell

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_010

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Adrenal gland

Eye

Harderian gland

Heart

Intestine Small

Kidney

Lung

Skin

Testis

Zymbal gland

Crystalline Lens

Retina

Hardarian Gland

Myocardium Nos

Mesentery Nos

Back

Pheochromocytoma

Cataract

Degeneration, Nos

Tissue Examined

Degeneration, Nos

Inflammation, Granulomatous Focal

Nephropathy

Congestion, Acute

Sebaceous Adenoma

Interstitial-Cell Tumor

Cystic Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_011

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Inflammation, Acute/Chronic

Testis

Tubule

Atrophy, Focal

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_012

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Myocardium Nos

Mineralization

Kidney

Nephropathy

Liver

Hepatocytes

Degeneration, Cystic

Bile Duct

Hyperplasia, Focal

Spleen

Red Pulp

Pigmentation, Nos

Thyroid

Hyperplasia, C Cell

Tongue

Squamous Cell Carcinoma

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene
CAS Number: 71-43-2

Date Report Requested: 10/26/2014
Time Report Requested: 17:53:24
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_013

TRT#: 3
DOSE: 100.0 MG/KG

SEX: Male
DISP: Terminal Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Harderian gland
Heart
Kidney
Liver

Harderian Gland
Myocardium Nos

Lung
Lymph node
Skin

Bile Duct
Mandibular Lymph Node

Testis

Tubule

Zymbal gland

Tissue Examined
Degeneration, Nos
Nephropathy
Clear-Cell Change
Hepatocellular Carcinoma
Hyperplasia, Focal
Alveolar Macrophages
Histiocytosis
Acanthosis
Hyperkeratosis
Degeneration, Nos
Interstitial-Cell Tumor
Cystic Ducts
Dilatation, Ducts
Hyperplasia, Epithelial
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_014

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Degeneration, Cystic

Bile Duct

Hyperplasia, Focal

Inflammation, Acute Focal

Lung

C-Cell Carcinoma, Metastatic

Lymph node

Mandibular Lymph Node

Histiocytosis

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Pancreas

Acinar-Cell Adenoma

Acinus

Hyperplasia, Focal

Islets

Hyperplasia, Focal

Skin

Back

Trichoepithelioma

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Thyroid

C-Cell Carcinoma

Hyperplasia, Follicular Cell

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_015

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Lung

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Alveoli

Tunica Vaginalis

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Neoplastic Nodule

Foreign Material, Nos

Interstitial-Cell Tumor

Mesothelioma, Nos

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_016

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Adrenal gland

Medulla

Fibrosis, Multifocal

Pheochromocytoma

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Liver

Hepatic Sinusoid

Congestion, Passive

Bile Duct

Hyperplasia, Focal

Hepatocytes

Necrosis, Focal

Lung

Aspiration, Foreign Body

Spleen

Follicles

Depletion, Lymphoid

Testis

Hyperplasia, Interstitial Cell

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_017

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver		Cytoplasmic Change, Basophilic
	Bile Duct	Hyperplasia, Focal
Lung		Pneumonia, Interstitial Chronic
Lymph node	Mandibular Lymph Node	Histiocytosis
Pancreas		Acinar-Cell Adenoma
Skin		Fibrosarcoma
	Eyelid Nos	Sebaceous Adenoma
	Back	Hematopoiesis
Spleen	Red Pulp	Necrosis, Focal
Stomach	Fundus	Degeneration, Nos
Testis	Tubule	Interstitial-Cell Tumor
		C-Cell Carcinoma
Thyroid		Tissue Examined
Zymbal gland		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_018

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Hyperplasia, Focal

Heart

Hardarian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Nephropathy

Pituitary gland

Bile Duct

Clear-Cell Change

Stomach

Pituitary Cell

Hyperplasia, Focal

Testis

Fundus

Hyperplasia, Focal

Tongue

Tubule

Necrosis, Focal

Zymbal gland

Degeneration, Nos

Interstitial-Cell Tumor

Squamous Cell Papilloma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_019

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Brain	Cerebrum	Granular-Cell Tumor, Benign
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
	Pituitary Cell	Hyperplasia, Focal
Testis		Hyperplasia, Interstitial Cell
Thymus		Cyst, Embryonal Duct
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_020

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Oral mucosa	Buccal Mucosa	Hyperplasia, Focal
Skin	Lip Nos	Squamous Cell Papilloma
Stomach	Fundus	Necrosis, Focal
Testis		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Cystic Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_021

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pancreas		Acinar-Cell Adenoma
Parathyroid gland		Adenoma, Nos
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Spleen	Red Pulp	Congestion, Nos
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Follicular-Cell Carcinoma
Unspecified	Thigh	Fibrous Histiocytoma, Malignant
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_022

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver		Clear-Cell Change
	Bile Duct	Hyperplasia, Focal
Pancreas	Islets	Islet-Cell Adenoma
	Islets	Islet-Cell Carcinoma
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Zymbal gland		Cystic Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_023

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Neoplastic Nodule

Lymph node

Mandibular Lymph Node

Plasmacytosis

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Unspecified

Axilla

Fibroma

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_024

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Congestion, Nos

Mandibular Lymph Node

Plasmacytosis

Pancreas

Acinus

Atrophy, Focal

Acinus

Hyperplasia, Focal

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Skin

Foot And Toe Nos

Acanthosis

Foot And Toe Nos

Hyperkeratosis

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_025

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Pituitary gland

Adenoma, Nos

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Thyroid

Cyst, Embryonal Duct

Hyperplasia, C Cell

Tongue

Squamous Cell Papilloma

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_026

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Plasmacytosis

Pancreas

Acinus

Atrophy, Focal

Pituitary gland

Adenoma, Nos

Skin

Lip Nos

Squamous Cell Papilloma

Spleen

Red Pulp

Hematopoiesis

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Tunica Vaginalis

Mesothelioma, Nos

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_027

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Salivary gland

Cytoplasmic Change, Basophilic

Spleen

Follicles

Depletion, Lymphoid

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Tongue

Interstitial-Cell Tumor

Unspecified

Groin

Squamous Cell Carcinoma

Zymbal gland

Fibroma

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_028

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Squamous Cell Carcinoma, Metastatic
Lymph node	Mandibular Lymph Node	Squamous Cell Carcinoma, Metastatic
Pancreas	Islets	Islet-Cell Carcinoma
Pituitary gland		Adenoma, Nos
Skin	Face	Squamous Cell Carcinoma
Spleen	Follicles	Depletion, Lymphoid
Stomach	Submucosa	Edema, Nos
Testis		Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_029

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Plasmacytosis

Pituitary gland

Adenoma, Nos

Skin

Back

Adenosquamous Carcinoma

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Tongue

Interstitial-Cell Tumor

Unspecified

Face

Squamous Cell Carcinoma

Zymbal gland

Inflammation, Acute/Chronic

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_030

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver

Pancreas
Testis

Thyroid
Zymbal gland

Zona Reticularis
Harderian Gland
Myocardium Nos

Bile Duct
Acinus
Tubule

Hematopoiesis
Tissue Examined
Degeneration, Nos
Nephropathy
Clear-Cell Change
Hyperplasia, Focal
Atrophy, Focal
Degeneration, Nos
Interstitial-Cell Tumor
Hyperplasia, C Cell
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_031

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Hematopoietic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Squamous Cell Carcinoma, Metastatic
Lymph node	Mandibular Lymph Node	Histiocytosis
	Cervical Lymph Node Nos	Squamous Cell Carcinoma, Metastatic
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Skin	Face	Squamous Cell Carcinoma
Spleen	Red Pulp	Hematopoiesis
Stomach	Fundus	Necrosis, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		C-Cell Carcinoma
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_032

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Intestine Small
Kidney
Liver
Lymph node
Pancreas
Stomach
Thymus
Zymbal gland

Cortex Nos
Harderian Gland
Mesentery Nos

Bile Duct
Mandibular Lymph Node
Islets
Fundus

Hyperplasia, Focal
Tissue Examined
Inflammation, Granulomatous Focal
Nephropathy
Hyperplasia, Focal
Plasmacytosis
Hyperplasia, Focal
Inflammation, Acute Necrotizing
Depletion, Lymphoid
Carcinoma, Nos
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_033

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland
Heart
Intestine Large
Kidney
Liver
Pituitary gland
Spleen

Testis
Thymus
Zymbal gland

Hardarian Gland
Myocardium Nos
Colon

Bile Duct

Follicles
Red Pulp
Tubule
Cortex

Tissue Examined
Degeneration, Nos
Parasitism
Nephropathy
Hyperplasia, Focal
Adenoma, Nos
Depletion, Lymphoid
Hematopoiesis
Degeneration, Nos
Depletion, Lymphoid
Dilatation, Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_034

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Heart

Carcinosarcoma, Metastatic

Liver

Hepatocytes

Necrosis, Focal

Lung

Carcinosarcoma

Pituitary gland

Hyperplasia, Focal

Testis

Interstitial-Cell Tumor

Unspecified

Mediastinum Nos

Carcinosarcoma, Invasive

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_035

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Acute/Chronic

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Prostate

Hemorrhage

Inflammation, Acute/Chronic

Thymus

Cortex

Depletion, Lymphoid

Urinary bladder

Submucosa

Hemorrhage

Inflammation, Acute Focal

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_036

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Blood vessel	Central Veins	Thrombus, Organized
Eye	Cornea	Inflammation, Acute Diffuse
Harderian gland	Hardarian Gland	Inflammation, Chronic
	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Plasmacytosis
Mammary gland	Mammary Acinus	Dilatation, Nos
Pituitary gland		Adenoma, Nos
Testis	Tubule	Degeneration, Nos
Thymus		Depletion, Lymphoid
Zymbal gland		Carcinoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_037

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Liver
Spleen
Testis
Zymbal gland

Zona Fasciculata
Hardarian Gland
Myocardium Nos
Bile Duct
Red Pulp

Cytoplasmic Vacuolization
Tissue Examined
Degeneration, Nos
Hyperplasia, Focal
Pigmentation, Nos
Hyperplasia, Interstitial Cell
Carcinoma, Nos
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_038

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Brain	Meninges	Carcinoma, Nos, Metastatic
	Cerebellum Nos	Hemorrhage
Eye	Crystalline Lens	Inflammation, Suppurative
		Necrosis, Diffuse
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Carcinoma, Nos, Metastatic
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Spleen	Follicles	Depletion, Lymphoid
	Red Pulp	Pigmentation, Nos
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
	Fundus	Ulcer, Acute
Testis		Hyperplasia, Interstitial Cell
Thymus		Depletion, Lymphoid
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_039

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Lung

Pneumonia, Interstitial Chronic

Lymph node

Mandibular Lymph Node

Plasmacytosis

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Pituitary gland

Adenoma, Nos

Skin

Shoulder

Keratoacanthoma

Testis

Tubule

Degeneration, Nos

Hyperplasia, Interstitial Cell

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_040

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Granulocytic
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Inflammation, Granulomatous Focal
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Histiocytosis
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Carcinoma, Nos
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_041

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Kidney

Papillary Duct/Bellini

Mineralization

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Oral mucosa

Palate Nos

Squamous Cell Carcinoma

Spleen

Follicles

Depletion, Lymphoid

Testis

Hyperplasia, Interstitial Cell

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_042

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Aspiration, Foreign Body

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Testis

Interstitial-Cell Tumor

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_043

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Intestine Small
Kidney
Liver
Lung
Oral mucosa
Pituitary gland
Testis

Unspecified

Zymbal gland

Zona Reticularis
Harderian Gland
Myocardium Nos
Jejunum

Bile Duct

Palate Nos
Pituitary Cell
Tubule

Diaphragm Nos
Abdomen

Hematopoiesis
Tissue Examined
Degeneration, Nos
Adenocarcinoma, Nos
Nephropathy
Hyperplasia, Focal
Adenocarcinoma, Nos, Metastatic
Squamous Cell Papilloma
Hyperplasia, Focal
Degeneration, Nos
Interstitial-Cell Tumor
Adenocarcinoma, Nos, Metastatic
Fibrosarcoma
Dilatation, Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_044

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Oral mucosa

Palate Nos

Squamous Cell Papilloma

Testis

Interstitial-Cell Tumor

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_045

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Cerebrum	Astrocytoma
Harderian gland	Harderian Gland	Adenocarcinoma, Nos
	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Inflammation, Granulomatous
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
	Centrilobular	Necrosis, Focal
Lung		Adenocarcinoma, Nos, Metastatic
Spleen	Red Pulp	Hematopoiesis
Testis		Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_046

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Skin

Sebaceous Gland

Hyperplasia, Nos

Stomach

Lip Nos

Squamous Cell Papilloma

Testis

Fundus

Necrosis, Focal

Unspecified

Tubule

Degeneration, Nos

Zymbal gland

Multiple Organs Nos

Interstitial-Cell Tumor

Leukemia, Mononuclear Cell

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276
Test Type: Long-Term
Route: Gavage
Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene
CAS Number: 71-43-2

Date Report Requested: 10/26/2014
Time Report Requested: 17:53:24
First Dose M/F: NA / NA
Lab: NA

ANIMAL ID: 3_047

TRT#: 3
DOSE: 100.0 MG/KG

SEX: Male
DISP: Dosing Accident

DAY ON TEST:
HISTO:

OBSERVATIONS

Esophagus	Periesophageal Tissue	Inflammation, Acute Focal
Harderian gland	Hardarian Gland	Tissue Examined
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pancreas	Islets	Hyperplasia, Focal
Spleen	Red Pulp	Congestion, Nos
Testis		Hyperplasia, Interstitial Cell
Thymus		Interstitial-Cell Tumor
Unspecified	Mediastinum Nos	Depletion, Lymphoid
Zymbal gland		Bacterial Septicemia
		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_048

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Cytoplasmic Vacuolization
Brain	Cerebrum	Atrophy, Pressure
Esophagus	Periesophageal Tissue	Inflammation, Acute Focal
Eye	Crystalline Lens	Cataract
		Synechia, Anterior
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
	Pericardium Nos	Inflammation, Acute Focal
Intestine Small	Mesentery Nos	Inflammation, Granulomatous Focal
Kidney		Nephrosis, Nos
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland	Mammary Acinus	Dilatation, Nos
Pituitary gland		Adenoma, Nos
Skin	Abdomen	Hyperkeratosis
	Abdomen	Parakeratosis
Unspecified	Mediastinum Nos	Hemorrhage
	Mediastinum Nos	Inflammation, Acute Focal
	Mediastinum Nos	Necrosis, Focal
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_049

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Kidney

Nephropathy

Liver

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Pancreas

Acinus

Atrophy, Focal

Parathyroid gland

Dilatation, Nos

Skin

Face

Squamous Cell Carcinoma

Spleen

Follicles

Depletion, Lymphoid

Stomach

Cardiac Stomach

Acanthosis

Cardiac Stomach

Hyperkeratosis

Fundus

Ulcer, Acute

Testis

Hyperplasia, Interstitial Cell

Thymus

Cyst, Embryonal Duct

Depletion, Lymphoid

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3_050

TRT#: 3

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver
Pancreas
Pituitary gland
Testis
Thyroid
Zymbal gland

Zona Fasciculata
Harderian Gland
Myocardium Nos

Bile Duct
Acinus

Cytoplasmic Vacuolization
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Atrophy, Focal
Adenoma, Nos
Hyperplasia, Interstitial Cell
Hyperplasia, C Cell
Cystic Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_001

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Pericardium Nos

Inflammation, Acute Focal

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Unspecified

Mediastinum Nos

Inflammation, Acute Focal

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_002

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye

Crystalline Lens

Cataract

Retina

Degeneration, Nos

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Cyst, Nos

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_003

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Bone marrow

Harderian gland

Unspecified

Zymbal gland

Harderian Gland

Harderian Gland

Multiple Organs Nos

Hypoplasia, Nos

Inflammation, Chronic

Tissue Examined

Leukemia, Mononuclear Cell

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_004

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Esophagus	Periesophageal Tissue	Inflammation, Acute Fibrinous
Harderian gland	Harderian Gland	Tissue Examined
Heart	Pericardium Nos	Inflammation, Acute/Chronic
Liver		Necrosis, Focal
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_005

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Reticulum Cell
Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Intestine Large	Colon	Parasitism
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid	Follicle	Dilatation, Nos
		Hyperplasia, C Cell
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_006

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Focal

Pituitary gland

Adenoma, Nos

Skin

Dermis

Hyperplasia, Basal Cell

Spleen

Red Pulp

Fibrosis, Multifocal

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_007

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Harderian Gland
Harderian Gland

Heart
Intestine Small
Kidney
Liver

Myocardium Nos
Mesentery Nos

Mammary gland
Pancreas
Pituitary gland
Testis
Zymbal gland

Bile Duct
Mammary Acinus

Pheochromocytoma
Inflammation, Chronic
Tissue Examined
Degeneration, Nos
Inflammation, Granulomatous Focal
Nephropathy
Cytoplasmic Change, Basophilic
Hyperplasia, Focal
Hyperplasia, Cystic
Acinar-Cell Adenoma
Adenoma, Nos
Edema, Interstitial
Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_008

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Inflammation, Chronic

Heart

Harderian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Nephropathy

Pancreas

Acinus

Hyperplasia, Focal

Preputial gland

Testis

Tubule

Acinar-Cell Adenoma

Atrophy, Focal

Carcinoma, Nos

Aspermatogenesis

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_009

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Inflammation, Chronic

Heart

Harderian Gland

Tissue Examined

Intestine Small

Myocardium Nos

Degeneration, Nos

Kidney

Mesentery Nos

Inflammation, Granulomatous Focal

Liver

Bile Duct

Nephropathy

Mammary gland

Hyperplasia, Focal

Testis

Tubule

Inflammation, Granulomatous Focal

Thyroid

Fibroadenoma

Zymbal gland

Degeneration, Nos

Interstitial-Cell Tumor

C-Cell Adenoma

Cyst, Follicular Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_010

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Inflammation, Chronic

Heart

Hardarian Gland

Tissue Examined

Kidney

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Nephropathy

Lymph node

Mandibular Lymph Node

Hyperplasia, Focal

Pancreas

Histiocytosis

Pituitary gland

Acinar-Cell Adenoma

Testis

Tubule

Carcinoma, Nos

Thyroid

Degeneration, Nos

Zymbal gland

Interstitial-Cell Tumor

C-Cell Adenoma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_011

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Granulomatous Focal

Pancreas

Acinus

Atrophy, Focal

Testis

Tubule

Degeneration, Nos

Unspecified

Mediastinum Nos

Interstitial-Cell Tumor

Zymbal gland

Inflammation, Granulomatous Focal

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_012

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Brain	Cerebrum	Atrophy, Pressure
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung	Pleura Nos	Osteosarcoma
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
Pancreas	Acinus	Atrophy, Focal
	Islets	Islet-Cell Carcinoma
Pituitary gland		Adenoma, Nos
Seminal vesicle		Inflammation, Acute Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		C-Cell Adenoma
Unspecified	Abdomen	Fibroma
Zymbal gland		Cystic Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_013

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Inflammation, Granulomatous Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Pancreas

Acinus

Atrophy, Focal

Pituitary gland

Pituitary Cell

Hyperplasia, Focal

Salivary gland

Fibrosis, Multifocal

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Carcinoma, Nos

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_014

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Medulla
Harderian Gland
Harderian Gland

Hyperplasia, Focal
Inflammation, Chronic
Tissue Examined
Degeneration, Nos
Inflammation, Granulomatous Focal

Heart
Intestine Small

Myocardium Nos
Mesentery Nos

Nephropathy
Hyperplasia, Focal
Inflammation, Granulomatous Focal

Kidney
Liver

Bile Duct

Hyperplasia, Focal
Hyperplasia, Focal

Lung

Mucosa
Muscularis

Atrophy, Focal
Inflammation, Active Chronic

Pancreas

Acinus

Degeneration, Nos
Interstitial-Cell Tumor

Testis

Tubule

Hyperplasia, C Cell
Tissue Examined

Thyroid
Zymbal gland

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_015

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Inflammation, Granulomatous Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Mandibular Lymph Node

Hyperplasia, Lymphoid

Mesenteric Lymph Node

Hyperplasia, Lymphoid

Prostate

Inflammation, Acute/Chronic

Spleen

Hyperplasia, Lymphoid

Tongue

Squamous Cell Papilloma

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_016

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Heart
Kidney
Liver
Stomach
Testis

Unspecified
Zymbal gland

Zona Fasciculata
Harderian Gland
Myocardium Nos

Bile Duct
Fundus
Tubule

Shoulder

Focal Cellular Change
Tissue Examined
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Necrosis, Focal
Degeneration, Nos
Interstitial-Cell Tumor
Fibroma
Tissue Examined

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_017

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Lung

Lymph node

Testis

Thyroid

Unspecified

Zymbal gland

Harderian Gland

Myocardium Nos

Hepatocytes

Bile Duct

Thymic Lymph Node

Tubule

Abdomen

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Cytoplasmic Vacuolization

Hyperplasia, Focal

Inflammation, Granulomatous Focal

Inflammation, Granulomatous Focal

Degeneration, Nos

Interstitial-Cell Tumor

C-Cell Adenoma

Fibroma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_018

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Salivary gland

Testis

Thyroid

Unspecified

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Tubule

Multiple Organs Nos

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Atrophy, Focal

Degeneration, Nos

Interstitial-Cell Tumor

Hyperplasia, C Cell

Leukemia, Mononuclear Cell

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_019

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland
Heart
Kidney
Liver

Harderian Gland
Myocardium Nos

Tissue Examined
Degeneration, Nos
Nephropathy
Angiectasis
Cytoplasmic Change, Basophilic

Lymph node
Mammary gland

Hepatocytes
Bile Duct
Mandibular Lymph Node
Mammary Acinus
Mammary Acinus

Degeneration, Cystic
Hyperplasia, Focal
Cyst, Nos
Hyperplasia, Cystic
Hyperplasia, Focal
Atrophy, Focal

Pancreas
Prostate
Testis

Acinus
Tubule

Inflammation, Chronic Focal
Degeneration, Nos
Interstitial-Cell Tumor

Thyroid
Zymbal gland

Tunica Vaginalis

Mesothelioma, Nos
C-Cell Adenoma
Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_020

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland

Zona Fasciculata
Hardarian Gland
Hardarian Gland

Necrosis, Focal
Inflammation, Chronic
Tissue Examined

Heart
Kidney

Myocardium Nos

Degeneration, Nos
Nephropathy

Liver
Mammary gland

Bile Duct
Mammary Acinus

Hyperplasia, Focal
Hyperplasia, Cystic

Stomach
Testis

Fundus
Tubule

Necrosis, Focal
Degeneration, Nos

Unspecified
Zymbal gland

Multiple Organs Nos

Interstitial-Cell Tumor
Leukemia, Mononuclear Cell
Dilatation, Ducts
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_021

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Pheochromocytoma
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver		Neoplastic Nodule
Mammary gland	Mammary Acinus	Hyperplasia, Cystic
		Hyperplasia, Cystic
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
	Cardiac Stomach	Inflammation, Acute Focal
	Fundus	Inflammation, Acute Focal
	Fundus	Ulcer, Acute
	Cardiac Stomach	Ulcer, Nos
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Cyst, Follicular Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_022

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Testis

Thymus

Thyroid

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Interstitial-Cell Tumor

Thymoma, Benign

Follicular-Cell Carcinoma

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_023

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Congestion, Acute

Mammary gland

Mammary Acinus

Hyperplasia, Cystic

Pituitary gland

Carcinoma, Nos

Skin

Face

Adenosquamous Carcinoma

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_024

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Pericardium Nos

Inflammation, Granulomatous Focal

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Pneumonia, Interstitial Chronic

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Thyroid

Interstitial-Cell Tumor

Unspecified

Mediastinum Nos

C-Cell Adenoma

Zymbal gland

Inflammation, Granulomatous Focal

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_025

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Intestine Small

Kidney

Liver

Lung

Mammary gland

Testis

Thyroid

Zymbal gland

Harderian Gland

Myocardium Nos

Mesentery Nos

Hepatocytes

Mammary Acinus

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Inflammation, Granulomatous Focal

Nephropathy

Cytoplasmic Vacuolization

Inflammation, Acute/Chronic

Hyperplasia, Cystic

Interstitial-Cell Tumor

Hyperplasia, C Cell

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_026

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Bile Duct

Hyperplasia, Focal

Mammary gland

Mammary Acinus

Cyst, Hemorrhagic

Testis

Tubule

Degeneration, Nos

Unspecified

Groin

Interstitial-Cell Tumor

Zymbal gland

Inflammation, Granulomatous Focal

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_027

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Lung

Pituitary gland

Testis

Thyroid

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Tubule

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Inflammation, Granulomatous Focal

Adenoma, Nos

Degeneration, Nos

Interstitial-Cell Tumor

C-Cell Carcinoma

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_028

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Brain	Hypothalamus Nos	Atrophy, Pressure
Harderian gland	Hardarian Gland	Inflammation, Chronic
	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Alveoli	Foreign Material, Nos
Pituitary gland		Adenoma, Nos
Stomach	Fundus	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Unspecified	Tunica Vaginalis	Mesothelioma, Nos
	Multiple Organs Nos	Leukemia, Mononuclear Cell
	Adipose Tissue	Necrosis, Focal
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_029

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Kidney

Liver

Pancreas

Stomach

Testis

Thyroid

Zymbal gland

Hardarian Gland

Bile Duct

Fundus

Tubule

Pheochromocytoma

Tissue Examined

Nephropathy

Hyperplasia, Focal

Acinar-Cell Adenoma

Necrosis, Focal

Degeneration, Nos

Interstitial-Cell Tumor

Hyperplasia, C Cell

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_030

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Intestine Small

Mesentery Nos

Inflammation, Granulomatous Focal

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Inflammation, Chronic Focal

Pituitary gland

Adenoma, Nos

Stomach

Fundus

Inflammation, Acute Focal

Testis

Fundus

Ulcer, Nos

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Tunica Vaginalis

Mesothelioma, Nos

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_031

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Inflammation, Chronic
	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Mammary gland		Adenoma, Nos
Pancreas	Acinus	Atrophy, Focal
Pituitary gland	Pituitary Cell	Hyperplasia, Focal
Stomach	Fundus	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_032

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland		Adenoma, Nos
Seminal vesicle		Inflammation, Chronic Focal
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_033

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Brain	Thalamus	Atrophy, Pressure
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Lymph node	Mandibular Lymph Node	Lymphangiectasis
Mammary gland	Mammary Acinus	Cyst, Multiple
		Hyperplasia, Adenomatous
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Prostate		Inflammation, Chronic Diffuse
Thyroid		C-Cell Carcinoma
Zymbal gland		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_034

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Eye	Crystalline Lens	Cataract
	Retina	Degeneration, Nos
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lung		Pneumonia, Interstitial Chronic
Lymph node	Mandibular Lymph Node	Cyst, Nos
Pancreas	Acinus	Atrophy, Focal
Pituitary gland		Adenoma, Nos
Prostate		Inflammation, Chronic Focal
Thyroid		C-Cell Adenoma
		Cyst, Follicular Nos
Unspecified	Axilla	Neurofibroma
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_035

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Prostate

Skin

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Hepatocytes

Bile Duct

Lip Nos

Back

Lip Nos

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Cytoplasmic Vacuolization

Hyperplasia, Focal

Inflammation, Acute/Chronic

Inflammation, Chronic Focal

Acanthosis

Fibrosis, Diffuse

Hyperkeratosis

Degeneration, Nos

Interstitial-Cell Tumor

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_036

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Natural Death

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephrosis, Nos

Liver

Bile Duct

Hyperplasia, Focal

Lymph node

Mandibular Lymph Node

Histiocytosis

Mammary gland

Mesenteric Lymph Node

Plasmacytosis

Zymbal gland

Dilatation, Ducts

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_037

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Zona Fasciculata

Focal Cellular Change

Esophagus

Muscularis

Degeneration, Nos

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Tubule

Pigmentation, Nos

Testis

Hyperplasia, Interstitial Cell

Unspecified

Axilla

Fibrosarcoma

Zymbal gland

Dilatation, Ducts

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_038

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Mammary gland

Pancreas

Pituitary gland

Prostate

Skin

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Face

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Nos

Hyperplasia, Cystic

Acinar-Cell Adenoma

Adenoma, Nos

Inflammation, Chronic Focal

Keratoacanthoma

Interstitial-Cell Tumor

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_039

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Eye	Cornea	Inflammation, Acute Suppurative
	Cornea	Ulcer, Focal
Harderian gland	Harderian Gland	Tissue Examined
Kidney		Nephropathy
Liver	Hepatocytes	Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Focal
Lung		Carcinoma, Nos, Metastatic
Lymph node	Mandibular Lymph Node	Histiocytosis
Pancreas	Acinus	Atrophy, Focal
Stomach	Cardiac Stomach	Acanthosis
	Cardiac Stomach	Hyperkeratosis
Testis		Hyperplasia, Interstitial Cell
		Interstitial-Cell Tumor
Zymbal gland		Carcinoma, Nos
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_040

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland
Harderian gland
Intestine Small
Kidney

Medulla
Hardarian Gland
Mesentery Nos

Hyperplasia, Focal
Tissue Examined
Inflammation, Granulomatous Focal
Nephropathy

Liver
Lymph node
Pancreas

Cortex
Bile Duct
Inguinal Lymph Node

Tubular-Cell Adenocarcinoma
Hyperplasia, Focal
Inflammation, Chronic Focal

Penis
Stomach
Testis

Acinus
Acinus
Prepuce Nos

Atrophy, Focal
Hyperplasia, Nos
Inflammation, Active Chronic

Zymbal gland

Fundus
Tubule

Necrosis, Focal
Degeneration, Nos
Interstitial-Cell Tumor
Dilatation, Ducts
Inflammation, Suppurative
Metaplasia, Squamous
Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_041

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Esophagus	Periesophageal Tissue	Inflammation, Acute Diffuse
Harderian gland	Hardarian Gland	Tissue Examined
Liver	Centrilobular	Necrosis, Focal
Trachea	Peritracheal Tissue	Inflammation, Acute Diffuse
Unspecified	Multiple Organs Nos	Bacterial Septicemia
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_042

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Examined

Unspecified

Multiple Organs Nos

Leukemia, Mononuclear Cell

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_043

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Clear-Cell Change

Bile Duct

Hyperplasia, Focal

Pancreas

Acinus

Hyperplasia, Nos

Pituitary gland

Adenoma, Nos

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Zymbal gland

Interstitial-Cell Tumor

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_044

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Harderian gland

Harderian Gland

Tissue Examined

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Cytoplasmic Change, Basophilic

Hepatocytes

Cytoplasmic Vacuolization

Bile Duct

Hyperplasia, Focal

Neoplastic Nodule

Lymph node

Mandibular Lymph Node

Histiocytosis

Pancreas

Acinus

Atrophy, Focal

Pituitary gland

Adenoma, Nos

Preputial gland

Carcinoma, Nos

Inflammation, Chronic Focal

Prostate

Inflammation, Chronic Focal

Skin

Back

Keratoacanthoma

Stomach

Fundus

Necrosis, Focal

Testis

Tubule

Degeneration, Nos

Interstitial-Cell Tumor

Zymbal gland

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_045

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Harderian gland

Hardarian Gland

Tissue Not Examined

Trachea

Peritracheal Tissue

Necrosis, Focal

Zymbal gland

Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_046

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Harderian gland

Heart

Kidney

Liver

Mammary gland

Pancreas

Pituitary gland

Prostate

Testis

Zymbal gland

Harderian Gland

Myocardium Nos

Bile Duct

Mammary Acinus

Acinus

Tubule

Pheochromocytoma

Tissue Examined

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Hyperplasia, Cystic

Atrophy, Focal

Adenoma, Nos

Inflammation, Chronic Focal

Degeneration, Nos

Interstitial-Cell Tumor

Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_047

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Zona Fasciculata	Clear-Cell Change
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Hyperplasia, Alveolar Epithelium
Pituitary gland		Carcinoma, Nos
		Cyst, Embryonal Duct
Testis	Tubule	Degeneration, Nos
		Interstitial-Cell Tumor
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_048

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Brain	Pons Nos	Carcinoma, Nos, Invasive
Harderian gland	Hardarian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
		Inflammation, Granulomatous Focal
Lymph node	Mandibular Lymph Node	Cyst, Nos
Pituitary gland		Carcinoma, Nos
Testis	Tubule	Degeneration, Nos
		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell
Unspecified	Axilla	Fibroma
Zymbal gland		Dilatation, Ducts
		Tissue Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_049

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Accidentally Killed

HISTO:

OBSERVATIONS

Esophagus
Harderian gland
Heart
Zymbal gland

Periesophageal Tissue
Harderian Gland
Myocardium Nos

Hemorrhage
Tissue Examined
Inflammation, Chronic Focal
Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 4_050

TRT#: 4

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Blood vessel	Conjunctival Artery	Thrombus, Canalized
Harderian gland	Harderian Gland	Tissue Examined
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Lung	Alveoli	Edema, Nos
Pituitary gland		Adenoma, Nos
Zymbal gland		Tissue Not Examined

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_051

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Depletion, Lymphoid
Spleen		Depletion, Lymphoid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_052

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Hemorrhage
	Thoracic Lymph Node	Hemorrhage
	Thoracic Lymph Node	Pigmentation, Nos
Spleen		Depletion, Lymphoid
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_053

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Intestine Small

Mesentery Nos

Steatitis

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

Lung

Inflammation, Interstitial

Lymph node

Mandibular Lymph Node

Congestion, Nos

Pancreas

Acinus

Atrophy, Focal

Spleen

Depletion, Lymphoid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_054

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Dosing Accident

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Inflammation, Chronic Focal
Kidney		Nephropathy
Lung		Foreign Material, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_055

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Spleen

Testis

Bile Duct

Mandibular Lymph Node

Nephropathy

Hyperplasia, Focal

Hemorrhage

Depletion, Lymphoid

Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_056

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Bile Duct

Hyperplasia, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_057

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lung

Lymph node

Spleen

Hepatocytes

Bile Duct

Hepatocytes

Bronchiole

Thoracic Lymph Node

Mandibular Lymph Node

Nephropathy

Degeneration, Nos

Hyperplasia, Focal

Necrosis, Focal

Hyperplasia, Lymphoid

Congestion, Nos

Hemorrhage

Depletion, Lymphoid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_058

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Kidney

Liver

Lymph node

Spleen

Testis

Bile Duct

Mandibular Lymph Node

Nephropathy

Hyperplasia, Focal

Congestion, Nos

Depletion, Lymphoid

Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_059

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Spleen		Depletion, Lymphoid
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 5_060

TRT#: 5

SEX: Male

DAY ON TEST:

DOSE: 200.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye	External Epithelium	Degeneration, Nos
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Pituitary gland	Pituitary Cell	Hypertrophy, Focal
Spleen		Depletion, Lymphoid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_051

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lymph node	Mandibular Lymph Node	Congestion, Nos
Mammary gland	Mammary Acinus	Hyperplasia, Focal
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_052

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Congestion, Nos
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_053

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Hemorrhage
Testis		Hyperplasia, Interstitial Cell
Trachea	Gland	Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_054

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Hepatocytes	Necrosis, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_055

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_056

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Congestion, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_058

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Epididymis

Heart

Kidney

Liver

Testis

Thyroid

Myocardium Nos

Bile Duct

Hyperplasia, Mesothelial

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Hyperplasia, Mesothelial

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_059

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Steatitis
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Aspiration, Foreign Body
		Inflammation, Interstitial
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 6_060

TRT#: 6

SEX: Male

DAY ON TEST:

DOSE: 050.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Mammary gland	Mammary Acinus	Hyperplasia, Focal
Testis	Tubule	Atrophy, Focal
	Tubule	Degeneration, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_051

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Congestion, Nos
Pancreas	Acinus	Atrophy, Focal
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_052

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Congestion, Nos
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_053

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Degeneration, Nos

Liver

Bile Duct

Hyperplasia, Focal

Thyroid

Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_054

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lymph node	Mandibular Lymph Node	Congestion, Nos
Testis	Tubule	Atrophy, Focal
	Tubule	Degeneration, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_055

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Lymph node	Mandibular Lymph Node	Congestion, Nos
Pituitary gland	Anterior Pituitary	Cyst, Embryonal Duct

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_056

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart

Myocardium Nos

Degeneration, Nos

Kidney

Nephropathy

Liver

Hepatocytes

Degeneration, Nos

Bile Duct

Hyperplasia, Focal

Hepatocytes

Necrosis, Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_057

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
		Inflammation, Acute/Chronic
	Hepatocytes	Necrosis, Focal
Testis		Hyperplasia, Interstitial Cell
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_058

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland

Heart

Kidney

Liver

Lung

Lymph node

Pituitary gland

Myocardium Nos

Bile Duct

Bronchiole

Mandibular Lymph Node

Anterior Pituitary

Ganglioneuroma

Degeneration, Nos

Nephropathy

Hyperplasia, Focal

Hyperplasia, Lymphoid

Inflammation, Interstitial

Congestion, Nos

Adenoma, Nos

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_059

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung		Aspiration, Foreign Body
		Inflammation, Interstitial
Pancreas	Acinus	Atrophy, Focal
Spleen		Depletion, Lymphoid
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 7_060

TRT#: 7

SEX: Male

DAY ON TEST:

DOSE: 100.0 MG/KG

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_051

TRT#: 8
DOSE: 0

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST:
HISTO:

OBSERVATIONS

Adrenal gland
Heart
Kidney
Liver
Pituitary gland
Testis

Cortex Nos
Myocardium Nos
Cortex
Bile Duct
Pituitary Cell

Hyperplasia, Focal
Degeneration, Nos
Nephropathy
Hyperplasia, Focal
Hypertrophy, Focal
Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_052

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Bile Duct	Hyperplasia, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
		Inflammation, Interstitial
Lymph node	Mandibular Lymph Node	Inflammation, Acute Focal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_053

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
		Inflammation, Acute/Chronic
Lung	Hepatocytes	Necrosis, Focal
		Aspiration, Foreign Body
	Bronchiole	Hyperplasia, Lymphoid
		Inflammation, Interstitial
Lymph node	Mandibular Lymph Node	Hemorrhage
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_054

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Pancreas	Acinus	Atrophy, Focal
Testis	Tubule	Atrophy, Diffuse
	Tubule	Degeneration, Nos
		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_055

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Intestine Small	Mesentery Nos	Granuloma, Foreign Body
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung	Bronchiole	Hyperplasia, Lymphoid
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_056

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung		Aspiration, Foreign Body
	Bronchiole	Hyperplasia, Lymphoid
		Inflammation, Interstitial
Pituitary gland	Anterior Pituitary	Cyst, Embryonal Duct
Thyroid	Follicle	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_057

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Bone marrow		Hyperplasia, Reticulum Cell
Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
	Hepatocytes	Necrosis, Focal
Lung		Aspiration, Foreign Body
	Bronchiole	Hyperplasia, Lymphoid
		Inflammation, Interstitial
Lymph node	Mandibular Lymph Node	Hemorrhage
Prostate		Inflammation, Acute/Chronic
Thymus		Hemorrhage

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_058

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Hepatocytes	Necrosis, Focal
Lung		Inflammation, Interstitial
Lymph node	Mandibular Lymph Node	Hemorrhage
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_059

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Eye	Retina	Degeneration, Nos
Intestine Small	Mesentery Nos	Granuloma, Foreign Body
Kidney		Nephropathy
Lung	Bronchiole	Hyperplasia, Lymphoid
		Inflammation, Granulomatous Focal
Testis		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: C55276

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Benzene

CAS Number: 71-43-2

Date Report Requested: 10/26/2014

Time Report Requested: 17:53:24

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 8_060

TRT#: 8

SEX: Male

DAY ON TEST:

DOSE: 0

DISP: Scheduled Sacrifice

HISTO:

OBSERVATIONS

Heart	Myocardium Nos	Degeneration, Nos
Kidney		Nephropathy
Liver	Hepatocytes	Degeneration, Nos
	Bile Duct	Hyperplasia, Focal
		Inflammation, Acute/Chronic
Lung	Hepatocytes	Necrosis, Focal
		Aspiration, Foreign Body
Lymph node		Inflammation, Interstitial
Testis	Mandibular Lymph Node	Hemorrhage
		Hyperplasia, Interstitial Cell

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****