

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | |
|-----------------------------|------------|
| C Number: | C62113 |
| Lock Date: | 02/16/1993 |
| Cage Range: | All |
| Date Range: | All |
| Reasons For Removal: | All |
| Removal Date Range: | All |
| Treatment Groups: | All |
| Study Gender: | Both |
| PWG Approval Date | NONE |

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 1 | TRT#: 1 | SEX: Male | DAY ON TEST: 92 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 890001 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|---|---------------------------|---------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Liver | | |
| Note: SCATTERED HEPATOCYTES HAVE FAT-TYPE VACUOLES. | | |
| * Lymph Node, Mandibular | Congestion | Mild |
| [Congestion TGLS = 1-9] | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 2 | TRT#: 1 | SEX: Male | DAY ON TEST: 92 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 890002 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Pituitary Gland

OBSERVATIONS

- | | | |
|------------------|---------------------------|---------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
|------------------|---------------------------|---------|

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------------------------|---|--|
| ANIMAL ID: 3 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 92 HISTO: 890003 |
|---------------------|--------------------------------------|---|--|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Pituitary Gland

OBSERVATIONS

| | | | |
|------------------|--------------|----------------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Dilatation | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 4 | TRT#: 1 | SEX: Male | DAY ON TEST: 92 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 890004 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|--------------------------|---------------------------|-------------------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Lymph Node, Mandibular | Hyperplasia | Lymphoid, Minimal |

PRIMARY CAUSE OF DEATH -

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------------------------|---|--|
| ANIMAL ID: 5 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 92 HISTO: 890005 |
|---------------------|--------------------------------------|---|--|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|------------------|----------------------------------|----------------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |

Note: ONE PREPUTIAL GLAND MISSING.

PRIMARY CAUSE OF DEATH -

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 6 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 890006 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|--------------------------|----------------------------------|----------------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |
| * Lymph Node, Mandibular | Congestion | Mild |

PRIMARY CAUSE OF DEATH -

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890007

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|------------------|---------------------------|---------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
|------------------|---------------------------|---------|

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 8 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 890008 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|------------------|----------------------------|------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Mild |
| * Liver | Hepatodiaphragmatic Nodule | |

Note: TISSUE IS MICROSCOPICALLY NORMAL.

[Hepatodiaphragmatic Nodule TGLS = 1-6]

PRIMARY CAUSE OF DEATH -

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890009

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|------------------|---------------------------|---------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Heart | Cardiomyopathy | Minimal |
| * Liver | | |

Note: SCATTERED AREAS HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890010

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|------------------|----------------------------------|----------------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |
| | Hepatodiaphragmatic Nodule | |

Note: SCATTERED CELLS HAVE FATTY CHANGE.

[Hepatodiaphragmatic Nodule TGLS = 2-6.1]

* Lymph Node, Mandibular

[Congestion TGLS = 1-9]

Congestion

Mild

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 11

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890101

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 12

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890102

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

Preputial Gland

OBSERVATIONS

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 2-6]

Preputial GI

Note: RED FOCUS PROBABLY REFLECTS NORMAL SECRETIONS.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 13

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890103

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Inflammation

Focal, Minimal

[Inflammation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 14

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890104

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mesenteric

OBSERVATIONS

| | | |
|--|----------------------------------|----------------|
| Liver | Hematopoietic Cell Proliferation | Focal, Minimal |
| [Hematopoietic Cell Proliferation TGLS = 06] | | |
| * Lymph Node, Mandibular | Congestion | Minimal |
| [Congestion TGLS = 1-9] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 15

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890105

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1,2-6.1,6.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 16

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890106

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 17

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890107

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 18

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890108

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-6]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 19

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890109

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 20

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890110

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 21

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890081

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hepatodiaphragmatic Nodule

Note: THE HYPERTROPHY IS FOCAL.

[Hepatodiaphragmatic Nodule TGLS = 1-6]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 22

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890082

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mesenteric

OBSERVATIONS

* Lymph Node, Mandibular

[Congestion TGLS = 1-9]

Congestion

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890083

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mesenteric

OBSERVATIONS

| | | |
|--|---------------------------------|----------------|
| Liver | Inflammation | Focal, Minimal |
| * Lymph Node, Mandibular | Congestion | Minimal |
| [Congestion TGLS = 1-9] | | |
| Urinary Bladder | Calculus Gross Observation | |
| | Calculus Micro Observation Only | Moderate |
| [Calculus Micro Observation Only TGLS = 2-9] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 24

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890084

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Lacrimal Gland

* Lymph Node, Mandibular

OBSERVATIONS

Lacrimal GI

Note: THE LACRIMAL GLAND IS MICROSCOPICALLY NORMAL.

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

* Lymph Node, Mesenteric

Hyperplasia

Lymphoid, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 25

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890085

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 26

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890086

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-6]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 27

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890087

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 28

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890088

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 09]

Stomach, Forestomach

Mucosa

Erosion

Focal, Minimal

[Erosion TGLS = 1-5.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 30

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890090

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Stomach, Forestomach

Mucosa

Erosion

Focal, Minimal

[Erosion TGLS = 1-5.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 31

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890061

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 32

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890062

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

* Liver

Fatty Change

Minimal

Note: THE FATTY CHANGE IS IN SCATTERED HEAPTOCYTES.

[Fatty Change TGLS = 1-6.2]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 33

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890063

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
* Lymph Node, Mesenteric

* Bone Marrow

* Liver

* Lymph Node, Mandibular

OBSERVATIONS

Kidney
* Liver

Papilla

Degeneration

Minimal

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 34

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890064

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

* Liver

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 35

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890065

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

* Liver

Hematopoietic Cell Proliferation

Focal, Minimal

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 36

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890066

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 37

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890067

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mesenteric

OBSERVATIONS

* Lymph Node, Mandibular

Congestion

Minimal

[Congestion TGLS = 1-9]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 38

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890068

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

* Lymph Node, Mandibular

Congestion

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 39

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890069

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

* Liver

Hematopoietic Cell Proliferation

Focal, Minimal

Note: HEPATOCELLULAR GLYCOGEN IS INCREASED. SCATTERED HEPATO-

Note: CYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 40

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
* Lymph Node, Mesenteric

* Bone Marrow

* Liver

* Lymph Node, Mandibular

OBSERVATIONS

Kidney
Stomach, Forestomach

Papilla
Mucosa
Mucosa

Degeneration
Erosion
Hyperplasia

Minimal
Focal, Minimal
Mild

[Erosion TGLS = 1-5.1]

[Hyperplasia TGLS = 1-5.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 41

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890041

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|---------------|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |

Note: NECROSIS IS OF SINGLE HEPATOCYTES.

- * Lung

Note: NO FOCI SEEN MICROSCOPICALLY.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 42

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890042

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|------------------|---------|---------------------------|---------------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |

Note: NECROSIS IS OF SINGLE HEPATOCYTES.

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 43

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890043

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|---|---------------------------|----------------------------|---------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Int Lg Cecum | | | |
| Note: CECUM FOCUS IS A LYMPHOID AGGREGATE. | | | |
| * Kidney | Papilla | Degeneration | Mild |
| * Liver | | Hepatodiaphragmatic Nodule | |
| [Hepatodiaphragmatic Nodule TGLS = 1-6.1] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 44

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890044

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|---|---------|----------------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Int Lg Cecum | | | |
| Note: CECUM FOCUS IS A LYMPHOID AGGREGATE. | | | |
| * Liver | | Fatty Change | Minimal |
| | | Hematopoietic Cell Proliferation | Focal, Minimal |
| Note: FATTY CHANGE IS FOCAL. | | | |
| Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE. | | | |
| [Fatty Change TGLS = 2-6.1] | | | |
| * Lung | | | |
| Note: GROSS FOCI WERE NOT SEEN MICROSCOPICALLY. | | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890045

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|------------------|--------------|---------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Renal Tubule | Dilatation | Focal, Minimal |
| * Liver | | Inflammation | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 46

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890046

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|------------------|---------|----------------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Papilla | Degeneration | Mild |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 47

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890047

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pancreas
- * Prostate
- * Skin
- * Testes
- * Urinary Bladder

- * Brain
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Salivary Glands
- * Spleen
- * Thymus

- * Epididymis
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Thyroid Gland

- * Esophagus
- * Intestine Small, Duodenum
- * Lung
- * Nose
- * Preputial Gland
- * Skeletal Muscle
- * Stomach, Glandular
- * Trachea

OBSERVATIONS

- * Adrenal Cortex
- * Bone
- * Bone Marrow
- * Heart
- * Kidney
- * Liver

- Distal, Femur, Metaphysis
- Femoral
- Papilla

- Vacuolization Cytoplasmic
- Atrophy
- Depletion Cellular
- Cardiomyopathy
- Degeneration
- Hematopoietic Cell Proliferation

- Minimal
- Minimal
- Minimal
- Minimal
- Moderate
- Focal, Minimal

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890048

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla | * Bone | * Brain | * Epididymis |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Mammary Gland | * Nose |
| * Pancreas | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Seminal Vesicle | * Skeletal Muscle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

| | | |
|--------------------------|---------------------|-------------------|
| * Lymph Node, Mandibular | * Parathyroid Gland | * Salivary Glands |
|--------------------------|---------------------|-------------------|

OBSERVATIONS

| | | | |
|--|---------|----------------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE. | | | |
| * Lymph Node, Mesenteric | | Congestion | Minimal |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 49

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890049

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Medulla
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Pituitary Gland
- * Seminal Vesicle
- * Stomach, Forestomach
- * Thyroid Gland

- * Bone
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Nose
- * Preputial Gland
- * Skeletal Muscle
- * Stomach, Glandular
- * Trachea

- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pancreas
- * Prostate
- * Skin
- * Testes
- * Urinary Bladder

- * Epididymis
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Salivary Glands
- * Spleen
- * Thymus

OBSERVATIONS

- * Adrenal Cortex
- * Bone Marrow
- * Kidney
- * Liver

Femoral
Papilla

Vacuolization Cytoplasmic
Depletion Cellular
Degeneration
Necrosis

Minimal
Minimal
Minimal
Multifocal, Minimal

Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE.

Note: NECROSIS IS OF SINGLE HEPATOCYTES.

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890050

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|--|---------|---------------------------|----------------|
| * Adrenal Cortex | | Vacuolization Cytoplasmic | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| * Liver | | | |
| Note: SCATTERED HEPATOCYTES HAVE FATTY CHANGE. | | | |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphoid, Mild |

PRIMARY CAUSE OF DEATH

-

Animal Note: VACUOLES ARE LIPID-TYPE.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 43

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890011

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Islets, Pancreatic
* Nose
* Prostate
* Stomach, Glandular
* Urinary Bladder

* Adrenal Medulla
* Epididymis
* Liver
* Pancreas
* Skeletal Muscle
* Testes

* Bone
* Esophagus
* Lung
* Parathyroid Gland
* Skin
* Thyroid Gland

* Bone Marrow
* Heart
* Mammary Gland
* Pituitary Gland
* Stomach, Forestomach
* Trachea

MISSING

* Lymph Node, Mandibular

* Salivary Glands

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum
* Intestine Small, Ileum

* Intestine Large, Colon
* Intestine Small, Jejunum

* Intestine Large, Rectum

* Intestine Small, Duodenum

OBSERVATIONS

* Kidney
* Lymph Node, Mesenteric
* Preputial Gland
* Seminal Vesicle
[Atrophy TGLS = 2-7.1]
* Spleen
* Thymus

Papilla
Lymphocyte

Lymphocyte

Degeneration
Depletion Cellular
Atrophy
Atrophy

Depletion Cellular
Depletion Lymphoid

Minimal
Mild
Minimal
Mild

Mild
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 52

TRT#: 11

SEX: Male

DAY ON TEST: 52

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890012

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Islets, Pancreatic | * Liver | * Lung | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Skeletal Muscle | * Skin | * Stomach, Forestomach | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|---|---------------------------|-----------------------|--------------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Epididymis | Lumen | Degeneration | Moderate |
| Eye | | Infiltration Cellular | Polymorphnuclr, Moderate |
| Note: THE EYE HAS PURULENT PANOPHTHALMITIS. | | | |
| [Infiltration Cellular TGLS = 2-14] | | | |
| * Int Lg Cecum | | | |
| Note: CECUM FOCI ARE LYMPHOID AGGREGATES. | | | |
| * Kidney | Papilla | Degeneration | Mild |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Pancreas | | Atrophy | Minimal |
| * Preputial Gland | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Seminal Vesicle | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 4-5.2] | | | |
| * Thymus | | Depletion Lymphoid | Marked |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:29

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 34

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890013

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|------------------|-------------------|---------------------|------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Kidney | * Liver | * Lung |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

MISSING

| | | | |
|----------------------|--------------------------|------------|----------|
| * Islets, Pancreatic | * Lymph Node, Mesenteric | * Pancreas | * Thymus |
|----------------------|--------------------------|------------|----------|

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|-----------------------------|---------------------------|--------------------|-------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Epididymis | Lumen | Degeneration | Moderate |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Preputial Gland | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 2-7.1] | | | |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Stomach, Glandular | Submucosa | Hemorrhage | Focal, Minimal |
| [Hemorrhage TGLS = 3-5.1] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 54

TRT#: 11

SEX: Male

DAY ON TEST: 43

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890014

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Heart
* Lymph Node, Mandibular
* Pancreas
* Prostate
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Islets, Pancreatic
* Lymph Node, Mesenteric
* Parathyroid Gland
* Salivary Glands
* Stomach, Forestomach
* Trachea

* Brain
* Liver
* Mammary Gland
* Pituitary Gland
* Skeletal Muscle
* Stomach, Glandular
* Urinary Bladder

* Esophagus
* Lung
* Nose
* Preputial Gland
* Skin
* Testes

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum
* Intestine Small, Ileum

* Intestine Large, Colon
* Intestine Small, Jejunum

* Intestine Large, Rectum

* Intestine Small, Duodenum

OBSERVATIONS

* Bone
* Bone Marrow
* Epididymis
* Kidney
* Seminal Vesicle
[Atrophy TGLS = 3-7.1]
* Thymus
[Depletion Lymphoid TGLS = 2-3]

Distal, Femur, Metaphysis
Femoral
Lumen
Papilla

Atrophy
Depletion Cellular
Degeneration
Degeneration
Atrophy
Depletion Lymphoid

Moderate
Moderate
Moderate
Minimal
Mild
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 55

TRT#: 11

SEX: Male

DAY ON TEST: 75

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890015

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lung | * Lymph Node, Mandibular | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|-----------------------------------|---------------------------|--------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Epididymis | Lumen | Degeneration | Moderate |
| Eye | Lens | Cataract | Marked |
| [Cataract TGLS = 2-14] | | | |
| * Kidney | Papilla | Degeneration | Minimal |
| | Renal Tubule | Dilatation | Focal, Minimal |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Preputial Gland | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Minimal |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 5-7.1] | | | |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Testes | Germinal Epith | Degeneration | Mild |
| * Thymus | | Depletion Lymphoid | Moderate |
| [Depletion Lymphoid TGLS = 4-3] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 35

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890016

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Brain | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Liver |
| * Lung | * Mammary Gland | * Nose | * Parathyroid Gland |
| * Pituitary Gland | * Prostate | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|-------------------|
| * Adrenal Cortex [Hyperplasia TGLS = 3-8] | | Hyperplasia | Mild |
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Epididymis | Lumen | Degeneration | Moderate |
| * Kidney | Renal Tubule | Dilatation | Focal, Minimal |
| | | Mineralization | Focal, Minimal |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Moderate |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| Note: TGL#4-8 ENLARGED MESENTERIC LYMPH NODE. | | | |
| * Pancreas | | Atrophy | Minimal |
| * Preputial Gland | | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Mild |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 6-7.1] | | | |
| * Thymus | | Depletion Lymphoid | Marked |
| [Depletion Lymphoid TGLS = 5-3] | | | |

PRIMARY CAUSE OF DEATH -

Animal Note: DEFINITION OF THE NODES.

Animal Note: ALTHOUGH MICROSCOPICALLY SMALLER THAN NORMAL, THE GROSS

Animal Note: APPEARANCE OF ENLARGEMENT IS PROBABLY DUE TO THE ENHANCED

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 35

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890016

ORGAN AND ACCOUNTABLE SITE STATUS

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 26

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890017

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Medulla | * Brain | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Thyroid Gland | * Trachea | * Urinary Bladder |

OBSERVATIONS

| | | | |
|---|---------------------------|--------------------|---------------------|
| * Adrenal Cortex | | Hyperplasia | Mild |
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Epididymis | Lumen | Degeneration | Moderate |
| * Kidney | Papilla | Degeneration | Mild |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Minimal |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Pancreas | | Atrophy | Minimal |
| Penis | | Hemorrhage | Focal, Minimal |
| [Hemorrhage TGLS = 2-14] | | | |
| * Preputial Gland | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Minimal |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 3-7.1] | | | |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stom Gland | | | |
| Note: GLANDULAR SQUAMOUS MUCOSA JUNCTION. | | | |
| * Testes | Germinal Epith | Degeneration | Mild |
| * Thymus | | Depletion Lymphoid | Moderate |
| [Depletion Lymphoid TGLS = 4-3] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 26

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890017

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: ONLY POTENTIAL "FOCUS" SEEN MICROSCOPICALLY IS THE

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 32

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890018

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|------------------|----------------------|---------------------|------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Liver | * Lung |
| * Mammary Gland | * Nose | * Parathyroid Gland | * Pituitary Gland |
| * Prostate | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

| | |
|--------------------------|----------|
| * Lymph Node, Mesenteric | * Thymus |
|--------------------------|----------|

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|---|---------------------------|--------------------|-------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Marked |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Epididymis | Lumen | Degeneration | Moderate |
| * Heart | | | |
| Note: DISCOLORATION IS PROBABLY FROM AUTOLYSIS. | | | |
| * Kidney | Papilla | Degeneration | Mild |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Minimal |
| * Pancreas | | Atrophy | Minimal |
| [Atrophy TGLS = 2-9] | | | |
| * Preputial Gland | | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Mild |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 5-7.1] | | | |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 6-5.2] | | | |
| * Testes | Germinal Epith | Degeneration | Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 32

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890018

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 43

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890019

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------|--------------------------|--------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Islets, Pancreatic | * Liver | * Lung | * Mammary Gland |
| * Nose | * Parathyroid Gland | * Pituitary Gland | * Prostate |
| * Skeletal Muscle | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Testes | * Thyroid Gland | * Trachea | * Urinary Bladder |

AUTO PRECLUDES DIAG.

| | | | |
|-----------------------------|--------------------------|----------------------------|--------------------------|
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Mesenteric |
|-----------------------------|--------------------------|----------------------------|--------------------------|

OBSERVATIONS

| | | | |
|--------------------------|---------------------------|--------------------|----------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Minimal |
| * Epididymis | Lumen | Degeneration | Moderate |
| * Kidney | Papilla | Degeneration | Mild |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Moderate |
| * Pancreas | | Atrophy | Minimal |
| * Preputial Gland | | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Minimal |
| * Seminal Vesicle | | Atrophy | Moderate |
| | [Atrophy TGLS = 2-7.1] | | |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Thymus | | Depletion Lymphoid | Marked |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 60

TRT#: 11

SEX: Male

DAY ON TEST: 26

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890020

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lung | * Mammary Gland | * Nose |
| * Parathyroid Gland | * Prostate | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

| | |
|--------------------------|-------------------|
| * Lymph Node, Mesenteric | * Pituitary Gland |
|--------------------------|-------------------|

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Epididymis | Lumen | Degeneration | Mild |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Pancreas | | Atrophy | Minimal |
| * Preputial Gland | | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Mild |
| * Seminal Vesicle | | Atrophy | Mild |
| [Atrophy TGLS = 1-7.1] | | | |
| * Testes | Germinal Epith | Degeneration | Moderate |
| * Thymus | | Depletion Lymphoid | Marked |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 66

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890021

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|----------------------------------|----------------|
| * Kidney | Mineralization | Focal, Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 67

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890022

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mandibular
- * Pancreas
- * Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mesenteric
- * Parathyroid Gland
- * Skin
- * Thymus
- * Uterus

- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Mammary Gland
- * Pituitary Gland
- * Spleen
- * Thyroid Gland
- Vagina

- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Nose
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

OBSERVATIONS

- * Kidney
- * Liver
- * Ovary

- Mineralization
- Hematopoietic Cell Proliferation
- Cyst

- Focal, Minimal
- Focal, Minimal
- Mild

Note: CYSTS ARE BILATERAL.

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 68

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890023

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|----------|---------|----------------------------------|----------------|
| * Kidney | Papilla | Degeneration | Minimal |
| | | Mineralization | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 69

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890024

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Clitoral GI

Note: ACCUMULATION.

Note: GROSS FOCUS PROBABLY REPRESENTS NORMAL SECRETION

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 70

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890025

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|----------------------------------|----------------|
| * Kidney | Mineralization | Focal, Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |

Note: HEPATOCELLULAR GLYCOGEN IS INCREASED.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 71

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890026

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Heart |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skeletal Muscle |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | * Uterus |
| Vagina | | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|--------------------------|------------|----------------------------------|----------------|
| * Kidney | | Mineralization | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Mild |
| Lymph Node | Pancreatic | Hyperplasia | Lymphoid, Mild |
| Mesentery | Fat | Necrosis | Moderate |
| [Necrosis TGLS = 1-14] | | | |
| * Ovary | | Cyst | Minimal |
| [Cyst TGLS = 2-7] | | | |
| * Thyroid Gland | | Ectopic Thymus | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 72

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890027

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|----------------------------------|----------------|
| * Kidney | Mineralization | Focal, Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 73

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890028

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Nose
- * Pituitary Gland
- * Spleen
- * Thyroid Gland
- Vagina

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Ovary
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Pancreas
- * Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Mammary Gland
- * Parathyroid Gland
- * Skin
- * Thymus
- * Uterus

OBSERVATIONS

- * Kidney Mineralization Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 74

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890029

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | |
|----------|----------------------------------|----------------|
| * Kidney | Mineralization | Focal, Minimal |
| * Liver | Hematopoietic Cell Proliferation | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 75

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 890030

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lung
- * Nose
- * Pituitary Gland
- * Spleen
- * Thyroid Gland
- Vagina

- * Adrenal Medulla
- * Clitoral Gland
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lymph Node, Mandibular
- * Ovary
- * Salivary Glands
- * Stomach, Forestomach
- * Trachea

- * Bone
- * Esophagus
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Pancreas
- * Skeletal Muscle
- * Stomach, Glandular
- * Urinary Bladder

- * Bone Marrow
- * Heart
- * Intestine Small, Duodenum
- * Liver
- * Mammary Gland
- * Parathyroid Gland
- * Skin
- * Thymus
- * Uterus

OBSERVATIONS

- * Kidney Mineralization Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890111

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 1-6]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 77

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890112

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 79

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890114

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Lung

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Lung

Note: NO FOCI SEEN MICROSCOPICALLY.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890115

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

Inflammation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

[Inflammation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 82

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Liver

Inflammation

Focal, Minimal

Stomach, Forestomach

Submucosa

Ectopic Tissue

Focal, Mild

[Ectopic Tissue TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

Animal Note: ECTOPIC TISSUE IS PANCREATIC.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 83

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890118

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mesenteric

Uterus

* Vagina

OBSERVATIONS

Liver

[Hematopoietic Cell Proliferation TGLS = 06]

Hematopoietic Cell Proliferation

Focal, Minimal

* Lymph Node, Mandibular

[Congestion TGLS = 1-9]

Congestion

Minimal

Uterus

Note: THE UTERUS IS MICROSCOPICALLY NORMAL.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 84

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890119

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 85

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 3.75 PPM

DISP: Terminal Sacrifice

HISTO: 890120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Vagina

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

Hepatodiaphragmatic Nodule

[Hematopoietic Cell Proliferation TGLS = 2-6.1]

[Hepatodiaphragmatic Nodule TGLS = 1-6.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 86

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890091

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 87

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890092

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-6.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 88

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890093

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hepatodiaphragmatic Nodule

Note: LIVER MALFORMATION IS OF THE CAUDATE LOBE.

Note: MEDIAN LOBE NODULE IS A DILATED BLOOD VESSEL.

Note: LATERAL LOBE FOCUS IS MOST LIKELY A DILATED VESSEL.

[Hepatodiaphragmatic Nodule TGLS = 2,5-6.2,6.3]

Lung

Inflammation

Subacute, Focal, Minimal

[Inflammation TGLS = 3-2+3]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 89

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890094

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hepatodiaphragmatic Nodule

Note: TWO LIVER MALFORMATIONS ARE PRESENT.

[Hepatodiaphragmatic Nodule TGLS = 1-6.1,2-6.2]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 90

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890095

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
Stomach, Forestomach

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Liver

Hematopoietic Cell Proliferation
Hepatodiaphragmatic Nodule

Focal, Minimal

Note: LIVER MALFORMATIONS ARE OF THE CAUDATE AND MEDIAN LOBES.

Note: LEFT LATERAL LOBE FOCUS IS A VESSEL.

[Hematopoietic Cell Proliferation TGLS = 06]

[Hepatodiaphragmatic Nodule TGLS = 2-6.1,4-6.2]

PRIMARY CAUSE OF DEATH

-

Animal Note: NO FOCI SEEN MICROSCOPICALLY; TISSUE IS CONTRACTED.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 91

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890096

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

Clitoral Gland

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Clitoral Gl

Note: FOCUS REPRESENTS NORMAL ACCUMULATION OF SECRETION.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 92

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890097

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-6.1]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

| | | | |
|----------------------|----------------------|---------------------------------|------------------------|
| ANIMAL ID: 93 | TRT#: 6 | SEX: Female | DAY ON TEST: 93 |
| | DOSE: 7.5 PPM | DISP: Terminal Sacrifice | HISTO: 890098 |

ORGAN AND ACCOUNTABLE SITE STATUS

| | | | |
|---------------|--------------------------|--------------------------|--|
| NORMAL | | | |
| * Bone | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | |

| | | | |
|---------------------|---------|--------------|-----------------------|
| OBSERVATIONS | | | |
| * Bone Marrow | Femoral | Inflammation | Subacute, Focal, Mild |

| | | | |
|-------------------------------|---|--|--|
| PRIMARY CAUSE OF DEATH | - | | |
|-------------------------------|---|--|--|

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 94

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890099

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mesenteric

OBSERVATIONS

* Lymph Node, Mandibular

Congestion

Minimal

[Congestion TGLS = 1-9]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 95

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 7.5 PPM

DISP: Terminal Sacrifice

HISTO: 890100

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

Liver

Hematopoietic Cell Proliferation

Focal, Minimal

[Hematopoietic Cell Proliferation TGLS = 06]

Mesentery

Fat

Necrosis

Mild

[Necrosis TGLS = 1-14]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 96

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890071

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Liver

* Lymph Node, Mesenteric

* Ovary

* Uterus

* Vagina

OBSERVATIONS

* Bone Marrow

Femoral

Depletion Cellular

Minimal

* Lymph Node, Mandibular

Hyperplasia

Lymphoid, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 97

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890072

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Ovary

* Uterus

* Vagina

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

* Liver

Hepatodiaphragmatic Nodule

Inflammation

Focal, Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-6]

[Inflammation TGLS = 06]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 98

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890073

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mandibular

* Ovary

* Uterus

* Vagina

OBSERVATIONS

Kidney

Papilla

Degeneration

Minimal

* Lymph Node, Mesenteric

Hyperplasia

Lymphoid, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 99

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890074

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
* Lymph Node, Mesenteric

* Bone Marrow
* Ovary

* Liver
* Uterus

* Lymph Node, Mandibular
* Vagina

OBSERVATIONS

Kidney Papilla Degeneration Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 100

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890075

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Liver

* Lymph Node, Mandibular

* Lymph Node, Mesenteric

* Ovary

* Uterus

* Vagina

OBSERVATIONS

Kidney

Papilla

Degeneration

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 101

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890076

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Bone Marrow

* Lymph Node, Mandibular

* Uterus

* Vagina

OBSERVATIONS

* Liver

Hematopoietic Cell Proliferation

Focal, Minimal

* Lymph Node, Mesenteric

Hyperplasia

Lymphoid, Minimal

* Ovary

Cyst

Minimal

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 102

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890077

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
* Lymph Node, Mesenteric

* Bone Marrow
* Ovary

* Liver
* Uterus

* Lymph Node, Mandibular
* Vagina

OBSERVATIONS

Kidney Papilla Degeneration Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 103

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890078

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone

* Liver

* Lymph Node, Mesenteric

* Ovary

* Uterus

* Vagina

OBSERVATIONS

* Bone Marrow

Femoral

Depletion Cellular

Minimal

Kidney

Papilla

Degeneration

Mild

* Lymph Node, Mandibular

Hyperplasia

Lymphoid, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 104

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890079

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------|----------------|--------------------------|--------------------------|
| * Bone | Clitoral Gland | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Uterus | * Vagina | | |

OBSERVATIONS

| | | | |
|--|-----------------------------|----------------------------------|-------------------|
| * Bone Marrow | Femoral | Depletion Cellular | Minimal |
| Clitoral Gl | | | |
| Note: GROSS NODULE REPRESENTS NORMAL ACCUMULATION OF SECRETIONS. | | | |
| Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| Lymph Node | Mediastinal | Hyperplasia | Lymphoid, Minimal |
| | [Hyperplasia TGLS = 3-14] | | |
| * Ovary | | Cyst | Minimal |
| | [Cyst TGLS = 2-7] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 105

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 15 PPM

DISP: Terminal Sacrifice

HISTO: 890080

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone
* Lymph Node, Mesenteric

* Bone Marrow
* Ovary

* Liver

* Lymph Node, Mandibular

OBSERVATIONS

Kidney Papilla Degeneration Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 106

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890051

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Mild |
| | | Mineralization | Focal, Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Ovary | Interstitium | Atrophy | Minimal |
| * Uterus | Endometrium | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 107

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890052

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|----------------------------|---------------------------|--------------------|-------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | | Mineralization | Focal, Minimal |
| * Liver | | Inflammation | Focal, Minimal |
| [Inflammation TGLS = 06] | | | |
| Lymph Node | Pancreatic | Hyperplasia | Lymphoid, Minimal |
| * Uterus | Endometrium | Atrophy | Mild |
| [Atrophy TGLS = 1-7] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 108

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890053

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skeletal Muscle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|---------------|---|----------------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Moderate |
| * Liver | | Hepatodiaphragmatic Nodule | |
| | | Inflammation | Focal, Minimal |
| | [Hepatodiaphragmatic Nodule TGLS = 1-6] | | |
| * Ovary | Interstitium | Atrophy | Minimal |
| * Uterus | Endometrium | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 109

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890054

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lung | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|--------------------------|---------------------------|--------------------|-------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Mild |
| | | Mineralization | Focal, Minimal |
| * Lymph Node, Mandibular | | Hyperplasia | Lymphoid, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Lymphoid, Minimal |
| * Uterus | Endometrium | Atrophy | Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 110

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890055

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Salivary Glands | * Skeletal Muscle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Thyroid Gland |
| * Trachea | * Urinary Bladder | | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|-------------------|--|----------------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Mild |
| | Sternum | Developmental Malformation | Mild |
| | [Developmental Malformation TGLS = 3-14] | | |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| | Sternal | Depletion Cellular | Minimal |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Inflammation | Focal, Minimal |
| * Pituitary Gland | Pars Nervosa | Developmental Malformation | Minimal |
| * Uterus | Endometrium | Atrophy | Mild |

[Atrophy TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 111

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890056

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|---------------|--|----------------------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Moderate |
| | | Mineralization | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| | [Hematopoietic Cell Proliferation TGLS = 06] | | |
| * Uterus | Endometrium | Atrophy | Mild |
| | [Atrophy TGLS = 2-7] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 112

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890057

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|---------------|--|----------------------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| | [Hematopoietic Cell Proliferation TGLS = 06] | | |
| * Ovary | Interstitialium | Atrophy | Minimal |
| * Uterus | Endometrium | Atrophy | Minimal |
| | [Atrophy TGLS = 1-7] | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 113

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890058

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skeletal Muscle | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

OBSERVATIONS

| | | | |
|---------------|---------------------------|----------------------------------|----------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| | | Inflammation | Focal, Minimal |
| * Ovary | Interstitial | Atrophy | Minimal |
| * Uterus | Endometrium | Atrophy | Mild |

[Atrophy TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 114

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890059

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Brain |
| * Clitoral Gland | * Esophagus | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Liver |
| * Lung | * Lymph Node, Mandibular | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skeletal Muscle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|--------------------------|--------------|--------------------|-------------------|
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | | Hyperplasia | Lymphoid, Minimal |
| * Ovary | Interstitial | Atrophy | Minimal |
| * Uterus | Endometrium | Atrophy | Mild |

[Atrophy TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

Animal Note: THE STOMACH IS CONTRACTED.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 115

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 30 PPM

DISP: Terminal Sacrifice

HISTO: 890060

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Clitoral Gland |
| * Esophagus | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skeletal Muscle | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | | | |

OBSERVATIONS

- | | | | |
|--|---------------------------|---------------------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Minimal |
| * Bone Marrow | Femoral | Depletion Cellular | Mild |
| * Liver | Hepatocyte | Inclusion Body Intracytoplasmic | Focal, Minimal |
| | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Uterus | Endometrium | Atrophy | Mild |
| [Atrophy TGLS = 1-7] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 30

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890031

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|------------------------|----------------------|-------------------|-------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Kidney | * Nose |
| * Parathyroid Gland | * Pituitary Gland | * Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | * Vagina | |

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Marked |
| * Bone Marrow | Femoral | Depletion Cellular | Marked |
| * Clitoral Gland | | Atrophy | Mild |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lung | | Edema | Mild |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Mammary Gland | | Atrophy | Mild |
| * Ovary | Interstitial | Atrophy | Minimal |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Moderate |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Thymus | | Depletion Lymphoid | Marked |

PRIMARY CAUSE OF DEATH

-

Animal Note: 1 SECTION OF THE GI TRACT MISSING.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 35

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890032

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Heart
* Nose
* Thyroid Gland
* Vagina

* Adrenal Medulla
* Islets, Pancreatic
* Skeletal Muscle
* Trachea

* Brain
* Kidney
* Skin
* Urinary Bladder

* Esophagus
* Lung
* Stomach, Forestomach
* Uterus

MISSING

* Lymph Node, Mandibular

* Parathyroid Gland

* Pituitary Gland

* Salivary Glands

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum
* Intestine Small, Ileum

* Intestine Large, Colon
* Intestine Small, Jejunum

* Intestine Large, Rectum

* Intestine Small, Duodenum

OBSERVATIONS

* Bone
* Bone Marrow
* Clitoral Gland
* Liver

Distal, Femur, Metaphysis
Femoral

Atrophy
Depletion Cellular
Atrophy
Necrosis

Moderate
Moderate
Minimal
Multifocal, Minimal

Note: NECROSIS IS OF SINGLE HEPATOCYTES.

* Lymph Node, Mesenteric
* Mammary Gland
* Ovary
* Pancreas
* Spleen
* Stomach, Glandular

Lymphocyte

Interstitialium
Lymphocyte
Mucosa

Depletion Cellular
Atrophy
Atrophy
Atrophy
Depletion Cellular
Hemorrhage

Mild
Mild
Minimal
Mild
Moderate
Focal, Mild

[Hemorrhage TGLS = 1-5+5.1]

* Thymus

Depletion Lymphoid

Moderate

PRIMARY CAUSE OF DEATH

-

Animal Note: 1 SECTION OF THE GI TRACT MISSING.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 40

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890033

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|------------------------|----------------------|-------------------|-------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Lung | * Nose |
| * Parathyroid Gland | * Pituitary Gland | * Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | * Vagina | |

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone [Atrophy TGLS = 11] | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Moderate |
| | | Mineralization | Focal, Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Minimal |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Mammary Gland | | Atrophy | Mild |
| * Ovary | Interstitium | Atrophy | Minimal |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Minimal |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Thymus | | Depletion Lymphoid | Marked |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 37

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890034

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-------------------|----------------------|-------------------|------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Lung | * Nose |
| * Pituitary Gland | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Vagina |

MISSING

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

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Marked |
| * Bone Marrow | Femoral | Depletion Cellular | Marked |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Minimal |
| | | Mineralization | Focal, Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Moderate |
| * Ovary | Interstitial | Atrophy | Minimal |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 4-5.2,5-5.2] | | | |
| * Thymus | | Depletion Lymphoid | Marked |
| [Depletion Lymphoid TGLS = 3-3.1] | | | |
| * Uterus | Endometrium | Atrophy | Mild |
| [Atrophy TGLS = 2-7] | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 37

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890034

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

Animal Note: 2 SECTIONS OF GI TRACT MISSING.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 24

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890035

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|------------------------|----------------------|-------------------|-------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Lung | * Nose |
| * Parathyroid Gland | * Pituitary Gland | * Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Vagina | | |

MISSING

| | |
|-----------------|---------|
| * Mammary Gland | * Ovary |
|-----------------|---------|

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | | Mineralization | Focal, Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Moderate |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Moderate |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Thymus | | Depletion Lymphoid | Moderate |
| * Uterus | Endometrium | Atrophy | Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 121

TRT#: 12

SEX: Female

DAY ON TEST: 39

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890036

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Nose | * Pituitary Gland | * Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | * Vagina | |

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Moderate |
| | | Mineralization | Focal, Minimal |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Moderate |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Moderate |
| * Mammary Gland | | Atrophy | Mild |
| * Ovary | Interstitial | Atrophy | Minimal |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 2-5.1] | | | |
| * Thymus | | Depletion Lymphoid | Moderate |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 122

TRT#: 12

SEX: Female

DAY ON TEST: 23

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890037

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-------------------|------------------------|-------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular |
| * Nose | * Pancreas | * Pituitary Gland | * Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Vagina | | |

MISSING

| | | | |
|--------------------------|---------------------|----------|--|
| * Lymph Node, Mesenteric | * Parathyroid Gland | * Thymus | |
|--------------------------|---------------------|----------|--|

AUTO PRECLUDES DIAG.

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

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Marked |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Minimal |
| * Liver | | Necrosis | Multifocal, Mild |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Mammary Gland | | Atrophy | Mild |
| * Ovary | Interstitial | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Moderate |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 5-5.1] | | | |
| * Uterus | Endometrium | Atrophy | Moderate |
| [Atrophy TGLS = 3-7] | | | |

PRIMARY CAUSE OF DEATH

-

Animal Note: ADRENAL GLANDS ARE MORPHOLOGICALLY NORMAL MICROSCOPICALLY.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 123

TRT#: 12

SEX: Female

DAY ON TEST: 33

DOSE: 60 PPM

DISP: Moribund Sacrifice

HISTO: 890038

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Nose | * Pituitary Gland | * Skeletal Muscle |
| * Skin | * Stomach, Forestomach | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Vagina | | |

MISSING

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

OBSERVATIONS

| | | | |
|--|---------------------------|-----------------------------------|------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Mild |
| * Liver | | Necrosis | Multifocal, Mild |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Minimal |
| * Ovary | Interstitium | Atrophy | Minimal |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Minimal |
| | | [Hemorrhage TGLS = 3-5.1] | |
| * Thymus | | Depletion Lymphoid | Moderate |
| | | [Depletion Lymphoid TGLS = 2-3] | |
| * Uterus | Endometrium | Atrophy | Mild |
| | | [Atrophy TGLS = 1-7] | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 124

TRT#: 12

SEX: Female

DAY ON TEST: 37

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890039

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lung | * Nose | * Parathyroid Gland |
| * Pituitary Gland | * Skeletal Muscle | * Skin | * Stomach, Forestomach |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Vagina |

OBSERVATIONS

| | | | |
|--|---------------------------|--------------------|---------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Marked |
| * Bone Marrow | Femoral | Depletion Cellular | Marked |
| [Depletion Cellular TGLS = 11] | | | |
| * Clitoral Gland | | Atrophy | Mild |
| * Liver | | Necrosis | Multifocal, Minimal |
| Note: NECROSIS IS OF SINGLE HEPATOCYTES. | | | |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Moderate |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Mild |
| * Mammary Gland | | Atrophy | Minimal |
| * Ovary | Interstitial | Atrophy | Mild |
| * Pancreas | | Atrophy | Minimal |
| * Salivary Glands | | Atrophy | Moderate |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Mild |
| [Hemorrhage TGLS = 4-5.1] | | | |
| * Thymus | | Depletion Lymphoid | Moderate |
| [Depletion Lymphoid TGLS = 2-3] | | | |
| * Uterus | Endometrium | Atrophy | Minimal |
| [Atrophy TGLS = 3-7] | | | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05195-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Sodium selenate

CAS Number: 13410-01-0

Date Report Requested: 10/17/2014

Time Report Requested: 11:45:30

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 125

TRT#: 12

SEX: Female

DAY ON TEST: 35

DOSE: 60 PPM

DISP: Natural Death

HISTO: 890040

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Brain | * Esophagus |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lung | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Skeletal Muscle | * Skin |
| * Stomach, Forestomach | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Vagina | | | |

MISSING

* Mammary Gland

OBSERVATIONS

| | | | |
|--------------------------|-----------------------------------|--------------------|-------------------|
| * Bone | Distal, Femur, Metaphysis | Atrophy | Moderate |
| * Bone Marrow | Femoral | Depletion Cellular | Moderate |
| | Femoral | Pigmentation | Hemosiderin, Mild |
| * Clitoral Gland | | Atrophy | Mild |
| * Kidney | Papilla | Degeneration | Mild |
| * Lymph Node, Mandibular | Lymphocyte | Depletion Cellular | Mild |
| * Lymph Node, Mesenteric | Lymphocyte | Depletion Cellular | Moderate |
| * Ovary | Interstitium | Atrophy | Mild |
| * Salivary Glands | | Atrophy | Mild |
| * Spleen | Lymphocyte | Depletion Cellular | Mild |
| * Stomach, Glandular | Mucosa | Hemorrhage | Focal, Minimal |
| | [Hemorrhage TGLS = 1-5+5.1] | | |
| * Thymus | | Depletion Lymphoid | Moderate |
| | [Depletion Lymphoid TGLS = 3-3] | | |
| * Uterus | Endometrium | Atrophy | Minimal |
| | [Atrophy TGLS = 4-7] | | |

PRIMARY CAUSE OF DEATH

-

** END OF REPORT **

* PROTOCOL REQUIRED TISSUE