

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | |
|-----------------------------|------------|
| C Number: | C99007B |
| Lock Date: | 09/23/2002 |
| 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: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------|---------------------------------|------------------------|
| ANIMAL ID: 1 | TRT#: 1 | SEX: Male | DAY ON TEST: 94 |
| | DOSE: 0 PPM | DISP: Terminal Sacrifice | HISTO: 98396 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | |
|----------|----------------|----------------|
| * Heart | Cardiomyopathy | Focal, Minimal |
| * Kidney | Nephropathy | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 2 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98397 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |
|-------------------|------------|------------------|-------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 3 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98398 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |
|-------------------|------------|------------------|-------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 4 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98399 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------------|----------------------|---------|
| * Thyroid Gland | Ultimobranchial Cyst | Minimal |
|-----------------|----------------------|---------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 5 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98400 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Kidney | | Nephropathy | Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 6 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98401 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|---------------------------|-------------------|
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Lymph Node, Mandibular | | Hemorrhage | Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 7 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98402 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Pancreas | Acinus | Atrophy | Focal, Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|---------------------|--------------------------------------|---|---|
| ANIMAL ID: 8 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98403 |
|---------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------|--------|--------------|----------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| * Lung | | Hemorrhage | Mild |
| * Pancreas | Acinus | Atrophy | Focal, Minimal |

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

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

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

OBSERVATIONS

| | | | |
|-------------------|------------|----------------------------------|-------------------|
| * Heart | | Cardiomyopathy | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| * Preputial Gland | Duct | Ectasia | Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|----------------------|--------------------------------------|---|---|
| ANIMAL ID: 10 | TRT#: 1 DOSE: 0 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98405 |
|----------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---|------------|------------------|-------------------|
| * Preputial Gland [Adenoma TGLS = 1-8] | | Adenoma | |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 11

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98406

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 12

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98407

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 13

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98408

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Vacuolization Cytoplasmic

Minimal

[Hepatodiaphragmatic Nodule TGLS = 2-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 14

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98409

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

Testes

Atrophy

Moderate

[Atrophy TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 15

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98410

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 16

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98411

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 17

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98412

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 18 | TRT#: 3 | SEX: Male | DAY ON TEST: 94 |
| | DOSE: 3125 PPM | DISP: Terminal Sacrifice | HISTO: 98413 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| PRIMARY CAUSE OF DEATH | | | |
| - | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 19

TRT#: 3

SEX: Male

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98414

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Vacuolization Cytoplasmic

Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 20 | TRT#: 3 | SEX: Male | DAY ON TEST: 94 |
| | DOSE: 3125 PPM | DISP: Terminal Sacrifice | HISTO: 98415 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| PRIMARY CAUSE OF DEATH | | | |
| - | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 21

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98416

OBSERVATIONS

* Liver

Hematopoietic Cell Proliferation

Focal, Minimal

Hepatodiaphragmatic Nodule

Mild

Vacuolization Cytoplasmic

Minimal

Hepatocyte

[Hepatodiaphragmatic Nodule TGLS = 1-21,2-22]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 22

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98417

OBSERVATIONS

Kidney
[Nephroblastoma TGLS = 1-21]

Nephroblastoma

* Liver

Hepatocyte

Hematopoietic Cell Proliferation

Focal, Minimal

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98418

OBSERVATIONS

| | | | |
|---------|------------|---------------------------|---------|
| * Liver | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| Spleen | | Accessory Spleen | Minimal |

[Accessory Spleen TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 24

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98419

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

Lymph Node

Mediastinal

Hyperplasia

Lymphoid, Mild

[Hyperplasia TGLS = 2-3]

Tooth

Malformation

Mild

[Malformation TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 25

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98420

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 26

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98421

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 27

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98422

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 28

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98423

OBSERVATIONS

* Liver

Hepatocyte

Hematopoietic Cell Proliferation

Vacuolization Cytoplasmic

Focal, Minimal

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 29

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98424

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 30

TRT#: 5

SEX: Male

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98425

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Vacuolization Cytoplasmic

Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|---|---|
| ANIMAL ID: 31 | TRT#: 7 DOSE: 12500 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98426 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 32

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98427

OBSERVATIONS

Eye

Atrophy

Mild

[Atrophy TGLS = 1-44]

* Liver

Hepatocyte

Hypertrophy

Minimal

Inflammation

Chronic, Focal, Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 33

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98428

OBSERVATIONS

* Liver

Hepatocyte

Hematopoietic Cell Proliferation

Focal, Minimal

Hepatocyte

Hypertrophy

Minimal

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 34

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98429

OBSERVATIONS

* Liver

Hepatocyte

Hematopoietic Cell Proliferation

Focal, Minimal

Hepatocyte

Hypertrophy

Minimal

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 35

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98430

OBSERVATIONS

* Liver

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 36

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98431

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 37

TRT#: 7

SEX: Male

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98432

OBSERVATIONS

* Liver

Hepatocyte

Hematopoietic Cell Proliferation

Focal, Minimal

Hepatocyte

Hypertrophy

Minimal

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|--|---|---|
| ANIMAL ID: 38 | TRT#: 7 DOSE: 12500 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98433 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|--|---|---|
| ANIMAL ID: 39 | TRT#: 7 DOSE: 12500 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98434 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|---|---|
| ANIMAL ID: 40 | TRT#: 7 DOSE: 12500 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98435 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 41

TRT#: 9

SEX: Male

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98436

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Hepatocyte

Hypertrophy

Minimal

Vacuolization Cytoplasmic

Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|---|---|
| ANIMAL ID: 42 | TRT#: 9 DOSE: 25000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98437 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Mild Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|--|---|
| ANIMAL ID: 43 | TRT#: 9 DOSE: 25000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98438 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Inflammation Vacuolization Cytoplasmic | Minimal Chronic, Focal, Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|---|---|
| ANIMAL ID: 44 | TRT#: 9 DOSE: 25000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98439 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98440

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|--|---|---|
| ANIMAL ID: 46 | TRT#: 9 DOSE: 25000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98441 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 47

TRT#: 9

SEX: Male

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98442

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98443

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|--------------------------------|--|---|---|
| ANIMAL ID: 49 | TRT#: 9 DOSE: 25000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98444 |
| OBSERVATIONS * Liver | Hepatocyte Hepatocyte | Hypertrophy Vacuolization Cytoplasmic | Minimal Minimal |
| PRIMARY CAUSE OF DEATH | - | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98445

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Hepatocyte

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|------------|---------------------------|----------------|
| * Heart | | Cardiomyopathy | Focal, Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 52

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-----------------|------------|---------------------------|----------------------------|
| * Heart | | Cardiomyopathy | Focal, Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Focal, Minimal |
| * Thyroid Gland | | Ultimobranchial Cyst | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Epididymis | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Kidney | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Preputial Gland |
| * Prostate | * Seminal Vesicle | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Testes | * Thymus |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|----------------------------------|-------------------------|
| * Liver | Hepatocyte | Hematopoietic Cell Proliferation | Focal, Minimal |
| | Hepatocyte | Hypertrophy | Mild |
| | | Vacuolization Cytoplasmic | Minimal |
| * Lung | | Inflammation | Chronic, Focal, Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |
| * Thyroid Gland | | Ultimobranchial Cyst | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 54

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|---------------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|----------------------|---|---|---|
| ANIMAL ID: 55 | TRT#: 11 DOSE: 50000 PPM | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98450 |
|----------------------|---|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|---------------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98451

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------|------------|---------------------------|----------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Pancreas | Acinus | Atrophy | Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-------------------|------------|----------------------------------|-------------------|
| * Heart | | Cardiomyopathy | Focal, Minimal |
| * Liver | | Hematopoietic Cell Proliferation | Focal, Minimal |
| | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98453

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|---------------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | Hepatocyte | Vacuolization Cytoplasmic | Minimal |
| * Pancreas | Acinus | Atrophy | Focal, Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Heart
* Intestine Small, Duodenum
* Lung
* Pancreas
* Prostate
* Stomach, Forestomach
* Thyroid Gland

* Adrenal Medulla
* Epididymis
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lymph Node, Mesenteric
* Parathyroid Gland
* Seminal Vesicle
* Stomach, Glandular
* Trachea

* Bone
* Esophagus
* Intestine Large, Colon
* Intestine Small, Jejunum
* Mammary Gland
* Pituitary Gland
* Skin
* Testes
* Urinary Bladder

* Bone Marrow
* Eye
* Intestine Large, Rectum
* Kidney
* Nose
* Preputial Gland
* Spleen
* Thymus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Harderian Gland
* Liver

* Salivary Glands

Hepatocyte
Hepatocyte
Parotid GI

Infiltration Cellular
Hypertrophy
Vacuolization Cytoplasmic
Basophilic Focus

Lymphocyte, Mild
Minimal
Minimal
Multiple, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 60

TRT#: 11

SEX: Male

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|----------------------------------|-------------------|
| * Liver | Hepatocyte | Hematopoietic Cell Proliferation | Focal, Minimal |
| | Hepatocyte | Hypertrophy | Minimal |
| * Salivary Glands | Parotid GI | Vacuolization Cytoplasmic | Minimal |
| * Thyroid Gland | | Basophilic Focus | Multiple, Minimal |
| | | Ultimobranchial Cyst | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 61

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Kidney
- * Nose
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pancreas
- * Skin
- * Thymus
- * Uterus

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Parathyroid Gland
- * Spleen
- * Thyroid Gland

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- * Liver

Hepatodiaphragmatic Nodule
Infiltration Cellular

Mild
Lymphocyte, Focal, Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 62

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98457

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Kidney
* Mammary Gland
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Liver
* Nose
* Pituitary Gland
* Stomach, Forestomach
* Trachea

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thymus
* Uterus

MISSING

* Lymph Node, Mandibular

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 63

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Kidney
* Mammary Gland
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Liver
* Nose
* Pituitary Gland
* Stomach, Forestomach
* Trachea

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thymus
* Uterus

MISSING

* Lymph Node, Mandibular

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 64

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Kidney
* Mammary Gland
* Parathyroid Gland
* Spleen
* Trachea

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Liver
* Nose
* Pituitary Gland
* Stomach, Forestomach
* Urinary Bladder

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Ovary
* Salivary Glands
* Stomach, Glandular
* Uterus

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thymus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Thyroid Gland

Ultimobranchial Cyst

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 65

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Kidney
* Mammary Gland
* Parathyroid Gland
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Liver
* Nose
* Pituitary Gland
* Stomach, Forestomach
* Trachea

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Ovary
* Salivary Glands
* Stomach, Glandular
* Urinary Bladder

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thymus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Uterus Hydrometra Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 66

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98461

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | |
|------------------|-----------------------------------|------|
| * Adrenal Cortex | Accessory Adrenal Cortical Nodule | Mild |
| * Uterus | Hydrometra | Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|----------------------|--------------------------------------|---|---|
| ANIMAL ID: 67 | TRT#: 2 DOSE: 0 PPM | SEX: Female DISP: Terminal Sacrifice | DAY ON TEST: 94 HISTO: 98462 |
|----------------------|--------------------------------------|---|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------|--------------------------|-------------------------------------|--------------------------|
| Lymph Node | Pancreatic Pancreatic | Hemorrhage Infiltration Cellular | Mild Histiocyte, Mild |
|------------|--------------------------|-------------------------------------|--------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 68

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Kidney
* Lymph Node, Mesenteric
* Pancreas
* Spleen
* Thyroid Gland

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Liver
* Mammary Gland
* Parathyroid Gland
* Stomach, Forestomach
* Trachea

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lung
* Nose
* Pituitary Gland
* Stomach, Glandular
* Urinary Bladder

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mandibular
* Ovary
* Skin
* Thymus
* Uterus

OBSERVATIONS

* Salivary Glands

Parotid GI

Basophilic Focus

Multiple, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 69

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex
* Brain
* Harderian Gland
* Intestine Large, Rectum
* Liver
* Mammary Gland
* Parathyroid Gland
* Spleen
* Trachea

* Adrenal Medulla
* Clitoral Gland
* Heart
* Intestine Small, Duodenum
* Lung
* Nose
* Pituitary Gland
* Stomach, Forestomach
* Urinary Bladder

* Bone
* Esophagus
* Intestine Large, Cecum
* Intestine Small, Ileum
* Lymph Node, Mandibular
* Ovary
* Salivary Glands
* Stomach, Glandular
* Uterus

* Bone Marrow
* Eye
* Intestine Large, Colon
* Intestine Small, Jejunum
* Lymph Node, Mesenteric
* Pancreas
* Skin
* Thymus

OBSERVATIONS

* Kidney
* Thyroid Gland

Nephropathy
Ultimobranchial Cyst

Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 70

TRT#: 2

SEX: Female

DAY ON TEST: 94

DOSE: 0 PPM

DISP: Terminal Sacrifice

HISTO: 98465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------|------------|--------------|-------------------------|
| * Liver | | Inflammation | Chronic, Focal, Minimal |
| Lymph Node | Pancreatic | Hemorrhage | Mild |
| * Uterus | | Hydrometra | Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 71

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98466

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 72

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 73

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98468

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 74

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 75

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 77

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 78

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 79

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 94

DOSE: 3125 PPM

DISP: Terminal Sacrifice

HISTO: 98475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 81

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98476

OBSERVATIONS

* Liver

Inflammation

Chronic, Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 82

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98477

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 83

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98478

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 84

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98479

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 85

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98480

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 86

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98481

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

OBSERVATIONS

Lung

Perivascular

Edema

Mild

Hemorrhage

Mild

[Hemorrhage TGLS = 4-2]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 87

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98482

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 88

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98483

OBSERVATIONS

* Liver

Vagina

[Cyst TGLS = 1-7]

Inflammation

Cyst

Chronic, Focal, Minimal

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 89

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98484

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 90

TRT#: 6

SEX: Female

DAY ON TEST: 94

DOSE: 6250 PPM

DISP: Terminal Sacrifice

HISTO: 98485

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 91

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98486

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Inflammation

Chronic, Focal, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 92

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98487

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Hypertrophy

Minimal

[Hepatodiaphragmatic Nodule TGLS = 2-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 93

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98488

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 94

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98489

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 95

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98490

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 96

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98491

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 97

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98492

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Ovary

Cyst

Mild

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 98

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98493

OBSERVATIONS

* Liver

Hepatocyte

Hepatodiaphragmatic Nodule

Mild

Hypertrophy

Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

| | | | |
|-------------------------------|------------------------|---------------------------------|------------------------|
| ANIMAL ID: 99 | TRT#: 8 | SEX: Female | DAY ON TEST: 94 |
| | DOSE: 12500 PPM | DISP: Terminal Sacrifice | HISTO: 98494 |
| OBSERVATIONS | | | |
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| PRIMARY CAUSE OF DEATH | | | |
| - | | | |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 100

TRT#: 8

SEX: Female

DAY ON TEST: 94

DOSE: 12500 PPM

DISP: Terminal Sacrifice

HISTO: 98495

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 101

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98496

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 102

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98497

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

Ovary

Cyst

Mild

[Cyst TGLS = 1-7]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 103

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98498

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 104

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98499

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 105

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98500

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 106

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98501

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 107

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98502

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 108

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98503

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 109

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98504

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 110

TRT#: 10

SEX: Female

DAY ON TEST: 94

DOSE: 25000 PPM

DISP: Terminal Sacrifice

HISTO: 98505

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 111

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98506

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Kidney |
| * Lung | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------------|
| * Heart | | Cardiomyopathy | Focal, Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | | Inflammation | Chronic, Focal, Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 112

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|------------|-------------|------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
|---------|------------|-------------|------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98508

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|------------|-------------|------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
|---------|------------|-------------|------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 114

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|---------------|-------------|---------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Pituitary Gland | Rathkes Cleft | Cyst | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 115

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla

* Clitoral Gland

* Heart

* Intestine Small, Duodenum

* Lung

* Ovary

* Skin

* Thymus

* Bone

* Esophagus

* Intestine Large, Cecum

* Intestine Small, Ileum

* Lymph Node, Mesenteric

* Pancreas

* Spleen

* Trachea

* Bone Marrow

* Eye

* Intestine Large, Colon

* Intestine Small, Jejunum

* Mammary Gland

* Parathyroid Gland

* Stomach, Forestomach

* Urinary Bladder

* Brain

* Harderian Gland

* Intestine Large, Rectum

* Kidney

* Nose

* Pituitary Gland

* Stomach, Glandular

* Uterus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex

* Liver

* Salivary Glands

* Thyroid Gland

Hepatocyte

Parotid GI

Hyperplasia

Hypertrophy

Basophilic Focus

Ultimobranchial Cyst

Focal, Mild

Mild

Multiple, Minimal

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Kidney
- * Nose
- * Pituitary Gland
- * Stomach, Glandular
- * Urinary Bladder

- * Adrenal Medulla
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Ovary
- * Skin
- * Thymus
- * Uterus

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pancreas
- * Spleen
- * Thyroid Gland

- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Parathyroid Gland
- * Stomach, Forestomach
- * Trachea

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Kidney | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Skin | * Spleen | * Stomach, Forestomach | * Thymus |
| * Trachea | * Urinary Bladder | | |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|----------------------|------------|-----------------------|----------------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Focal, Minimal |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |
| * Stomach, Glandular | | Infiltration Cellular | Lymphocyte, Focal, Mild |
| * Thyroid Gland | | Ultimobranchial Cyst | Minimal |
| * Uterus | Cervix | Cyst | Mild |

[Cyst TGLS = 2-21]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|------------|-------------|------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
|---------|------------|-------------|------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 99007-03

Test Type: 90-DAY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Goldenseal root powder

CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014

Time Report Requested: 02:33:29

First Dose M/F: NA / NA

Lab: SRI

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 94

DOSE: 50000 PPM

DISP: Terminal Sacrifice

HISTO: 98515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Harderian Gland | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Kidney | * Lung | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------------------|------------|------------------|-------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Ovary | | Cyst | Minimal |
| [Cyst TGLS = 2-7] | | | |
| * Salivary Glands | Parotid GI | Basophilic Focus | Multiple, Minimal |

PRIMARY CAUSE OF DEATH

-

** END OF REPORT **

* PROTOCOL REQUIRED TISSUE