

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | |
|-----------------------------|------------|
| C Number: | C20540D |
| Lock Date: | 08/01/2007 |
| Cage Range: | All |
| Date Range: | All |
| Reasons For Removal: | All |
| Removal Date Range: | All |
| Treatment Groups: | All |
| Study Gender: | Male |
| PWG Approval Date | NONE |

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 601

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 602

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606169

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 603

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606170

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 604

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606171

OBSERVATIONS

| | | |
|----------|-----------------------|-------------------------|
| * Kidney | Infiltration Cellular | Mononuclear CI, Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| | Mitotic Alteration | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 605

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606172

OBSERVATIONS

* Kidney
* Liver

Infiltration Cellular
Infiltration Cellular

Mononuclear CI, Minimal
Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 606

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606173

OBSERVATIONS

* Kidney
* Liver

Mineralization
Infiltration Cellular
Mitotic Alteration

Minimal
Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 607

TRT#: 1

SEX: Male

DAY ON TEST: 15

DOSE: 0 ppm

DISP: Scheduled Sacrifice

HISTO: 0606174

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Mitotic Alteration

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 608

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606175

OBSERVATIONS

* Kidney
* Liver

Infiltration Cellular
Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 609

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606176

OBSERVATIONS

* Kidney
* Liver

Infiltration Cellular
Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 610

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606177

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 611

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606178

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 612

TRT#: 1
DOSE: 0 ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606179

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 613

TRT#: 1

SEX: Male

DAY ON TEST: 91

DOSE: 0 ppm

DISP: Scheduled Sacrifice

HISTO: 0606180

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|-------------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Inflammation | Chronic, Minimal |
| * Nose | Inflammation | Chronic, Minimal |
| * Preputial Gland | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 614

TRT#: 1

SEX: Male

DAY ON TEST: 91

DOSE: 0 ppm

DISP: Scheduled Sacrifice

HISTO: 0606181

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|-------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Moderate |
| * Nose | Goblet Cell | Hyperplasia | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|--------------------------------------|--|---|
| ANIMAL ID: 615 | TRT#: 1 DOSE: 0 ppm | SEX: Male DISP: Scheduled Sacrifice | DAY ON TEST: 91 HISTO: 0606182 |
|-----------------------|--------------------------------------|--|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|--------------------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | Hyperplasia | Histiocytic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 616

TRT#: 1

SEX: Male

DAY ON TEST: 91

DOSE: 0 ppm

DISP: Scheduled Sacrifice

HISTO: 0606183

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lymph Node, Mandibular | * 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 | * Urinary Bladder | |

OBSERVATIONS

| | | |
|--------------------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | Hyperplasia | Histiocytic, Minimal |
| * Trachea | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 617

TRT#: 1

SEX: Male

DAY ON TEST: 91

DOSE: 0 ppm

DISP: Scheduled Sacrifice

HISTO: 0606184

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|-------------------|---------------------------|-------------------------|
| * Adrenal Cortex | Vacuolization Cytoplasmic | Minimal |
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Clear Cell Focus | |
| | Infiltration Cellular | Mononuclear CI, Minimal |
| * Preputial Gland | Inflammation | Chronic, Minimal |
| * Trachea | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|--------------------------------------|--|---|
| ANIMAL ID: 618 | TRT#: 1 DOSE: 0 ppm | SEX: Male DISP: Scheduled Sacrifice | DAY ON TEST: 91 HISTO: 0606185 |
|-----------------------|--------------------------------------|--|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|---|----------|-----------------------|-------------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Nose | | Inflammation | Chronic, Minimal |
| * Pituitary Gland | | Metaplasia | Mild |
| Note: Entered diagnosis of metaplasia for pituitary gland but best descriptive term would be ectopic salivary gland tissue. | | | |
| * Preputial Gland | | Inflammation | Chronic, Mild |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|--------------------------------------|---|--|
| ANIMAL ID: 619 | TRT#: 1 DOSE: 0 ppm | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 150 HISTO: 0606186 |
|-----------------------|--------------------------------------|---|--|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Hemorrhage | Minimal |
| | Alveolar Epith | Hyperplasia | Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 620

TRT#: 1

SEX: Male

DAY ON TEST: 150

DOSE: 0 ppm

DISP: Terminal Sacrifice

HISTO: 0606187

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|-----------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 621

TRT#: 1

SEX: Male

DAY ON TEST: 150

DOSE: 0 ppm

DISP: Terminal Sacrifice

HISTO: 0606188

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|---------|-----------------------|-------------------------|
| * Harderian Gland | | Inflammation | Chronic, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | Papilla | Inflammation | Chronic, Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 622

TRT#: 1

SEX: Male

DAY ON TEST: 150

DOSE: 0 ppm

DISP: Terminal Sacrifice

HISTO: 0606189

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|-----------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | Bile Duct | Hyperplasia | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Nose | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Mild |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 623

TRT#: 1

SEX: Male

DAY ON TEST: 150

DOSE: 0 ppm

DISP: Terminal Sacrifice

HISTO: 0606190

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|---------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Pituitary Gland | Pars Distalis | Hyperplasia | Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|--------------------------------------|---|--|
| ANIMAL ID: 624 | TRT#: 1 DOSE: 0 ppm | SEX: Male DISP: Terminal Sacrifice | DAY ON TEST: 150 HISTO: 0606191 |
|-----------------------|--------------------------------------|---|--|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|--------------------------|-----------------------|-------------------------|
| * Epididymis | Infiltration Cellular | Mononuclear CI, Minimal |
| * Heart | Cardiomyopathy | Mild |
| * Kidney | Infiltration Cellular | Mononuclear CI, Minimal |
| | Nephropathy | Minimal |
| * Liver | Fatty Change | Minimal |
| | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Hemorrhage | Mild |
| * Lymph Node, Mesenteric | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 701

TRT#: 2

SEX: Male

DAY ON TEST: 3

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606192

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 702

TRT#: 2

SEX: Male

DAY ON TEST: 3

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606193

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 703

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606194

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular
Mitotic Alteration

Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 704

TRT#: 2

SEX: Male

DAY ON TEST: 3

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606195

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Mitotic Alteration

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 705

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606196

OBSERVATIONS

* Kidney
* Liver

Mineralization
Infiltration Cellular

Minimal
Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 706

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 3
HISTO: 0606197

OBSERVATIONS

* Kidney
* Liver

Mineralization
Infiltration Cellular
Mitotic Alteration

Minimal
Mononuclear CI, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 707

TRT#: 2

SEX: Male

DAY ON TEST: 15

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606198

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|------------------------|----------------------------------|------------------------|
| ANIMAL ID: 708 | TRT#: 2 | SEX: Male | DAY ON TEST: 15 |
| | DOSE: DMNA 5ppm | DISP: Scheduled Sacrifice | HISTO: 0606199 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

| | | | |
|---------|------------|--------------------------------------|------------------------------------|
| * Liver | Hepatocyte | Hypertrophy Infiltration Cellular | Minimal Mononuclear CI, Minimal |
|---------|------------|--------------------------------------|------------------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 709

TRT#: 2

SEX: Male

DAY ON TEST: 15

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606200

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 710

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606201

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

| | | | |
|---------|------------|--------------------------------------|------------------------------------|
| * Liver | Hepatocyte | Hypertrophy Infiltration Cellular | Minimal Mononuclear CI, Minimal |
|---------|------------|--------------------------------------|------------------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 711

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606202

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

| | | | |
|---------|------------|--------------------------------------|------------------------------------|
| * Liver | Hepatocyte | Hypertrophy Infiltration Cellular | Minimal Mononuclear CI, Minimal |
|---------|------------|--------------------------------------|------------------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 712

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 15
HISTO: 0606203

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Kidney

OBSERVATIONS

* Liver

Hepatocyte

Fatty Change
Hypertrophy
Infiltration Cellular

Minimal
Minimal
Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 713

TRT#: 2

SEX: Male

DAY ON TEST: 91

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606204

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|-------------------|---|----------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Minimal |
| | Periportal | Fibrosis | Minimal |
| | Hepatocyte | Hepatodiaphragmatic Nodule | |
| | | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| | [Hepatodiaphragmatic Nodule TGLS = 1-2] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|--|--|---|
| ANIMAL ID: 714 | TRT#: 2 DOSE: DMNA 5ppm | SEX: Male DISP: Scheduled Sacrifice | DAY ON TEST: 91 HISTO: 0606205 |
|-----------------------|--|--|---|

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|-------------------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Mild |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03

Test Type: 150-DAY

Route: DOSED WATER

Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014

Time Report Requested: 06:39:19

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 715

TRT#: 2

SEX: Male

DAY ON TEST: 91

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606206

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|-------------------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 716

TRT#: 2

SEX: Male

DAY ON TEST: 91

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606207

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Mineralization | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Mild |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:19
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 717

TRT#: 2
DOSE: DMNA 5ppm

SEX: Male
DISP: Scheduled Sacrifice

DAY ON TEST: 91
HISTO: 0606208

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Parathyroid Gland

OBSERVATIONS

| | | | |
|--------------------------|---|----------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hepatodiaphragmatic Nodule | |
| | | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| | [Hepatodiaphragmatic Nodule TGLS = 1-2] | | |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Nose | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 718

TRT#: 2

SEX: Male

DAY ON TEST: 91

DOSE: DMNA 5ppm

DISP: Scheduled Sacrifice

HISTO: 0606209

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|-----------------------|-------------------------|
| * Liver | Hepatocyte | Fatty Change | Mild |
| | | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |
| * Trachea | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 719

TRT#: 2

SEX: Male

DAY ON TEST: 150

DOSE: DMNA 5ppm

DISP: Terminal Sacrifice

HISTO: 0606210

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|---|----------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hepatodiaphragmatic Nodule | |
| | | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| | [Hepatodiaphragmatic Nodule TGLS = 1-2] | | |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 720

TRT#: 2

SEX: Male

DAY ON TEST: 150

DOSE: DMNA 5ppm

DISP: Terminal Sacrifice

HISTO: 0606211

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|-----------------------|-------------------------|
| * Harderian Gland | | Inflammation | Chronic, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Liver | | Fatty Change | Minimal |
| | Bile Duct | Hyperplasia | Minimal |
| | Oval Cell | Hyperplasia | Minimal |
| | Hepatocyte | Hypertrophy | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Mild |
| * Trachea | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|------------------------|---------------------------------|-------------------------|
| ANIMAL ID: 721 | TRT#: 2 | SEX: Male | DAY ON TEST: 150 |
| | DOSE: DMNA 5ppm | DISP: Terminal Sacrifice | HISTO: 0606212 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hypertrophy | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Hemorrhage | Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Pancreas | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Mild |
| * Trachea | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 722

TRT#: 2

SEX: Male

DAY ON TEST: 150

DOSE: DMNA 5ppm

DISP: Terminal Sacrifice

HISTO: 0606213

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Bile Duct | Hyperplasia | Minimal |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolar Epith | Hyperplasia | Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Pancreas | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 723

TRT#: 2

SEX: Male

DAY ON TEST: 150

DOSE: DMNA 5ppm

DISP: Terminal Sacrifice

HISTO: 0606214

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Fatty Change | Mild |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | | Inflammation | Chronic, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20540-03
Test Type: 150-DAY
Route: DOSED WATER
Species/Strain: Rat/F344/N Tac

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: N-Nitrosodimethylamine (TGMX rat liver evaluation)
CAS Number: 62-75-9

Date Report Requested: 10/16/2014
Time Report Requested: 06:39:20
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|-----------------------|------------------------|---------------------------------|-------------------------|
| ANIMAL ID: 724 | TRT#: 2 | SEX: Male | DAY ON TEST: 150 |
| | DOSE: DMNA 5ppm | DISP: Terminal Sacrifice | HISTO: 0606215 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | | |
|--------------------------|-------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Basophilic Focus | |
| | | Clear Cell Focus | |
| | | Fatty Change | Minimal |
| | Hepatocyte | Hypertrophy | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lymph Node, Mesenteric | | Hyperplasia | Histiocytic, Minimal |
| * Nose | Globet Cell | Hyperplasia | Minimal |
| * Pancreas | | Inflammation | Chronic, Minimal |
| * Preputial Gland | | Inflammation | Chronic, Minimal |
| * Trachea | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH -

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE