

**TDMS No.** 20114 - 07  
**Test Type:** CHRONIC  
**Route:** DOSED WATER  
**Species/Strain:** RATS/F 344

**P18: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE (a) WITH  
AVERAGE SEVERITY GRADES[b]**  
Sodium dichromate dihydrate (VI)  
**CAS Number:** 7789-12-0

**Date Report Reqsted:** 10/04/2007  
**Time Report Reqsted:** 10:38:19  
**First Dose M/F:** 10/02/02 / 10/02/02  
**Lab:** SRI

F2\_R2

|                             |             |            |            |
|-----------------------------|-------------|------------|------------|
| <b>C Number:</b>            | C20114      |            |            |
| <b>Lock Date:</b>           | 10/04/2005  |            |            |
| <b>Cage Range:</b>          | ALL         |            |            |
| <b>Date Range:</b>          | ALL         |            |            |
| <b>Reasons For Removal:</b> | 25021 TSAC  | 25020 NATD | 25019 MSAC |
| <b>Removal Date Range:</b>  | ALL         |            |            |
| <b>Treatment Groups:</b>    | Include ALL |            |            |
| <b>TDMSE Version:</b>       | 1.8.0       |            |            |

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| FISCHER 344 RATS MALE             | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|-----------------------------------|----------|-----------|-----------|----------|----------|
| <b>Disposition Summary</b>        |          |           |           |          |          |
| Animals Initially in Study        | 50       | 50        | 50        | 50       | 50       |
| Early Deaths                      |          |           |           |          |          |
| Moribund Sacrifice                | 16       | 15        | 16        | 9        | 16       |
| Natural Death                     | 6        | 5         | 3         | 5        | 4        |
| Survivors                         |          |           |           |          |          |
| Terminal Sacrifice                | 28       | 30        | 30        | 36       | 29       |
| Animals Examined Microscopically  | 50       | 50        | 49        | 50       | 49       |
| <b>ALIMENTARY SYSTEM</b>          |          |           |           |          |          |
| Intestine Large, Cecum            | (45)     | (48)      | (46)      | (47)     | (48)     |
| Edema                             |          | 1 [2.0]   | 1 [2.0]   | 2 [2.5]  | 2 [2.0]  |
| Erosion                           |          |           |           | 1 [3.0]  |          |
| Ulcer                             |          |           | 1 [3.0]   |          | 1 [1.0]  |
| Intestine Large, Colon            | (47)     | (49)      | (49)      | (48)     | (48)     |
| Edema                             | 1 [2.0]  |           |           |          |          |
| Infiltration Cellular, Lymphocyte |          |           |           |          | 1 [2.0]  |
| Intestine Small, Duodenum         | (48)     | (48)      | (47)      | (46)     | (48)     |
| Erosion                           | 1 [2.0]  |           |           | 1 [2.0]  |          |
| Infiltration Cellular, Histiocyte |          |           | 6 [1.2]   | 36 [1.1] | 47 [1.5] |
| Ulcer                             |          | 1 [3.0]   |           |          |          |
| Intestine Small, Ileum            | (45)     | (46)      | (46)      | (45)     | (47)     |
| Hyperplasia                       | 1 [2.0]  |           |           |          |          |
| Lymphoid Tissue, Hyperplasia      | 10 [2.3] | 11 [1.8]  | 9 [2.0]   | 7 [1.9]  | 10 [2.0] |
| Intestine Small, Jejunum          | (44)     | (47)      | (45)      | (46)     | (46)     |
| Hyperplasia                       |          |           |           |          | 1 [2.0]  |
| Epithelium, Hyperplasia           | 1 [3.0]  |           |           |          |          |
| Liver                             | (50)     | (50)      | (49)      | (50)     | (49)     |
| Angiectasis                       | 1 [2.0]  | 1 [2.0]   |           |          |          |
| Basophilic Focus                  | 22       | 28        | 29        | 32       | 30       |
| Clear Cell Focus                  | 23       | 19        | 16        | 29       | 25       |
| Degeneration, Cystic              | 7 [2.0]  | 3 [1.7]   | 2 [2.0]   |          | 2 [1.0]  |
| Eosinophilic Focus                | 10       | 5         | 4         | 8        | 9        |
| Fatty Change                      | 12 [3.0] | 10 [2.4]  | 10 [2.5]  | 8 [2.9]  | 12 [2.5] |
| Hematopoietic Cell Proliferation  | 1 [1.0]  |           | 3 [1.7]   |          |          |
| Hemorrhage                        |          | 2 [2.0]   | 1 [1.0]   | 4 [1.8]  | 3 [1.3]  |

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|-----------------------------------|----------|-----------|-----------|----------|----------|
| Hepatodiaphragmatic Nodule        | 5        | 6         | 6         | 7        | 10       |
| Infiltration Cellular, Histiocyte | 1 [1.0]  |           | 2 [1.0]   | 5 [1.4]  | 34 [1.4] |
| Inflammation, Chronic             | 19 [1.1] | 25 [1.2]  | 21 [1.3]  | 28 [1.1] | 26 [1.3] |
| Mixed Cell Focus                  | 11       | 7         | 5         | 13       | 10       |
| Necrosis                          | 3 [1.3]  | 3 [1.3]   |           | 2 [1.0]  | 1 [1.0]  |
| Regeneration                      | 2        | 2         |           |          |          |
| Syncytial Alteration              |          |           |           |          | 1 [2.0]  |
| Thrombosis                        | 1 [2.0]  |           |           |          |          |
| Bile Duct, Hyperplasia            | 47 [1.9] | 38 [1.9]  | 33 [1.6]  | 22 [1.8] | 15 [1.7] |
| Centrilobular, Necrosis           | 8 [2.6]  | 1 [1.0]   | 3 [1.7]   | 2 [1.5]  | 5 [2.0]  |
| Hepatocyte, Hyperplasia, Focal    |          | 1 [3.0]   |           |          |          |
| Intima, Vein, Hyperplasia         |          |           |           |          | 1 [2.0]  |
| Kupffer Cell, Pigmentation        | 2 [1.5]  |           | 1 [3.0]   |          |          |
| Mesentery                         | (12)     | (4)       | (15)      | (14)     | (15)     |
| Accessory Spleen                  | 1        |           | 1         | 1        | 1        |
| Hemorrhage                        |          |           |           |          | 1 [3.0]  |
| Fat, Necrosis                     | 11 [3.0] | 3 [3.7]   | 10 [2.9]  | 12 [3.0] | 13 [3.0] |
| Oral Mucosa                       | (50)     | (50)      | (49)      | (50)     | (49)     |
| Pancreas                          | (50)     | (50)      | (49)      | (50)     | (49)     |
| Atrophy                           | 25 [1.8] | 16 [2.1]  | 24 [2.0]  | 24 [1.7] | 31 [2.0] |
| Cyst                              | 9 [3.0]  | 7 [3.1]   | 9 [3.0]   | 9 [3.0]  | 12 [3.0] |
| Acinus, Cytoplasmic Alteration    |          |           | 1 [3.0]   |          | 3 [3.0]  |
| Acinus, Hyperplasia, Focal        | 6 [2.5]  | 10 [1.8]  | 9 [2.2]   | 7 [2.4]  | 9 [1.9]  |
| Salivary Glands                   | (50)     | (50)      | (49)      | (49)     | (49)     |
| Atrophy                           | 3 [1.3]  | 1 [1.0]   | 2 [1.0]   | 4 [1.3]  | 3 [2.0]  |
| Necrosis                          |          |           | 1 [2.0]   |          | 2 [2.0]  |
| Duct, Cyst                        |          | 1 [4.0]   |           |          |          |
| Stomach, Forestomach              | (50)     | (50)      | (49)      | (50)     | (49)     |
| Edema                             | 3 [2.7]  |           |           | 3 [3.0]  | 3 [2.0]  |
| Erosion                           |          |           |           | 1 [1.0]  | 1 [1.0]  |
| Inflammation, Chronic Active      |          | 1 [3.0]   |           | 1 [3.0]  | 1 [3.0]  |
| Ulcer                             | 1 [4.0]  | 3 [2.7]   | 3 [3.0]   | 2 [4.0]  | 1 [3.0]  |
| Epithelium, Hyperplasia           | 1 [2.0]  | 2 [2.0]   | 2 [2.0]   | 5 [2.2]  | 1 [3.0]  |
| Stomach, Glandular                | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cyst                              |          |           |           |          | 1        |
| Edema                             |          | 1 [2.0]   |           | 1 [3.0]  |          |
| Erosion                           | 8 [2.6]  | 4 [2.8]   | 6 [2.3]   | 5 [2.0]  | 2 [1.0]  |
| Hyperplasia                       | 8 [1.1]  | 4 [1.0]   | 9 [1.1]   | 12 [1.1] | 12 [1.1] |
| Infiltration Cellular, Lymphocyte |          |           |           |          | 1 [2.0]  |
| Ulcer                             | 1 [3.0]  | 3 [3.0]   | 1 [3.0]   | 1 [2.0]  |          |

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|-----------------------------------|----------|-----------|-----------|----------|----------|
| Epithelium, Glands, Dilatation    |          |           |           | 1 [2.0]  |          |
| Glands, Dilatation                | 1 [2.0]  |           | 1 [2.0]   |          | 1 [2.0]  |
| Tongue                            | (49)     | (50)      | (47)      | (49)     | (48)     |
| Fibrosis                          |          |           |           |          | 1 [2.0]  |
| Hemorrhage                        | 1 [2.0]  |           |           |          | 1 [1.0]  |
| Hemorrhage, Chronic               |          |           |           |          | 1 [1.0]  |
| Inflammation, Chronic             | 2 [1.0]  | 5 [1.2]   | 6 [1.0]   | 6 [1.0]  | 3 [1.0]  |
| Epithelium, Hyperplasia           | 2 [2.5]  |           |           | 2 [1.0]  | 1 [2.0]  |
| Vein, Thrombosis                  |          |           |           |          | 1 [3.0]  |
| Tooth                             | (0)      | (0)       | (0)       | (1)      | (4)      |
| Malformation                      |          |           |           |          | 1        |
| CARDIOVASCULAR SYSTEM             |          |           |           |          |          |
| Blood Vessel                      | (0)      | (4)       | (0)       | (0)      | (3)      |
| Dilatation                        |          |           |           |          | 1 [3.0]  |
| Heart                             | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cardiomyopathy                    | 46 [2.3] | 44 [2.5]  | 44 [2.3]  | 45 [2.5] | 45 [1.8] |
| Inflammation, Chronic             |          |           |           |          | 1 [2.0]  |
| Thrombosis                        | 5 [3.6]  | 3 [3.3]   | 1 [2.0]   | 2 [3.5]  |          |
| ENDOCRINE SYSTEM                  |          |           |           |          |          |
| Adrenal Cortex                    | (50)     | (50)      | (49)      | (50)     | (49)     |
| Accessory Adrenal Cortical Nodule | 17 [3.0] | 18 [3.0]  | 13 [3.0]  | 17 [3.0] | 8 [3.0]  |
| Angiectasis                       | 1 [3.0]  |           | 1 [3.0]   | 1 [3.0]  |          |
| Degeneration, Fatty               | 7 [2.1]  | 10 [1.5]  | 9 [1.7]   | 7 [1.4]  | 11 [1.5] |
| Hyperplasia, Focal                | 2 [2.0]  | 1 [2.0]   | 6 [1.2]   |          | 3 [1.0]  |
| Hyperplasia, Diffuse              | 1 [3.0]  |           | 1 [3.0]   |          |          |
| Hypertrophy                       | 1 [3.0]  |           |           |          |          |
| Hypertrophy, Focal                |          | 2 [1.5]   |           | 4 [1.5]  | 4 [2.0]  |
| Necrosis                          |          | 2 [3.5]   | 1 [4.0]   | 1 [3.0]  | 1 [3.0]  |
| Adrenal Medulla                   | (49)     | (50)      | (49)      | (50)     | (49)     |
| Hyperplasia                       | 12 [1.4] | 11 [1.6]  | 17 [1.8]  | 9 [1.6]  | 14 [1.6] |
| Islets, Pancreatic                | (50)     | (50)      | (49)      | (50)     | (49)     |
| Hyperplasia                       | 2 [2.0]  |           |           | 1 [3.0]  | 1 [2.0]  |
| Parathyroid Gland                 | (46)     | (46)      | (46)      | (49)     | (48)     |
| Hyperplasia                       |          |           |           |          | 1 [2.0]  |
| Pituitary Gland                   | (50)     | (50)      | (49)      | (50)     | (49)     |

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|--|----------|-----------|-----------|----------|----------|
| Pars Distalis, Angiectasis                             | 2 [3.5]  | 3 [3.3]   | 2 [3.0]   | 5 [2.4]  | 3 [3.0]  |
| Pars Distalis, Cyst                                    | 3 [3.0]  | 4 [3.0]   | 7 [3.0]   | 5 [3.2]  | 5 [3.0]  |
| Pars Distalis, Cytoplasmic Alteration,<br>Focal        | 2 [2.0]  | 2 [2.0]   | 3 [2.0]   | 2 [1.0]  | 2 [2.0]  |
| Pars Distalis, Hyperplasia                             |          | 1 [3.0]   |           | 1 [2.0]  | 1 [3.0]  |
| Pars Distalis, Hyperplasia, Focal                      | 12 [1.6] | 6 [2.0]   | 12 [1.9]  | 14 [2.1] | 11 [2.1] |
| Pars Intermedia, Angiectasis                           | 1 [2.0]  |           |           | 1 [2.0]  | 2 [2.0]  |
| Pars Intermedia, Cyst                                  | 1 [3.0]  | 1 [3.0]   | 2 [3.0]   | 1 [3.0]  | 1 [3.0]  |
| Pars Intermedia, Metaplasia, Atypical                  |          | 1 [3.0]   |           |          |          |
| Pars Intermedia, Pars Nervosa,<br>Metaplasia, Atypical |          |           |           | 1 [3.0]  |          |
| Thyroid Gland  | (50)     | (50)      | (49)      | (50)     | (49)     |
| Ultimobranchial Cyst                                   |          |           | 1 [3.0]   |          | 2 [3.0]  |
| C-cell, Hyperplasia                                    | 11 [1.6] | 13 [1.4]  | 18 [1.3]  | 14 [1.5] | 5 [1.2]  |
| Follicle, Cyst   | 1 [3.0]  | 1 [3.0]   |           |          | 2 [3.5]  |
| GENERAL BODY SYSTEM                                    |          |           |           |          |          |
| None   |          |           |           |          |          |
| GENITAL SYSTEM   |          |           |           |          |          |
| Epididymis   | (50)     | (50)      | (49)      | (50)     | (49)     |
| Granuloma Sperm  | 2 [2.5]  |           |           |          | 1 [3.0]  |
| Inflammation, Chronic                                  | 1 [2.0]  |           | 2 [2.0]   | 2 [2.5]  | 2 [2.0]  |
| Preputial Gland  | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cyst   | 1 [3.0]  | 1 [3.0]   |           |          | 1 [3.0]  |
| Hyperplasia  | 1 [2.0]  | 1 [1.0]   | 2 [3.0]   |          | 1 [2.0]  |
| Inflammation, Chronic                                  | 16 [2.3] | 11 [2.4]  | 13 [2.2]  | 17 [2.2] | 16 [2.3] |
| Prostate   | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cyst   |          |           | 1 [3.0]   |          |          |
| Inflammation, Chronic                                  | 19 [2.3] | 17 [2.4]  | 14 [2.3]  | 8 [2.1]  | 14 [2.1] |
| Epithelium, Hyperplasia                                | 7 [1.3]  | 11 [1.1]  | 7 [1.6]   | 7 [1.4]  | 8 [1.1]  |
| Seminal Vesicle  | (50)     | (50)      | (49)      | (50)     | (49)     |
| Inflammation, Chronic                                  |          |           |           | 1 [4.0]  |          |
| Testes   | (50)     | (50)      | (49)      | (50)     | (49)     |
| Germinal Epithelium, Atrophy                           | 5 [3.0]  | 4 [2.8]   | 6 [3.2]   | 4 [2.8]  | 8 [2.9]  |
| Interstitial Cell, Hyperplasia                         | 4 [2.0]  | 5 [1.8]   | 3 [1.7]   | 4 [2.0]  | 4 [1.8]  |

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|--------------------------------------|----------|-----------|-----------|----------|----------|
| HEMATOPOIETIC SYSTEM                 |          |           |           |          |          |
| Bone Marrow                          | (50)     | (50)      | (49)      | (50)     | (49)     |
| Hemorrhage                           | 1 [4.0]  |           |           |          |          |
| Hyperplasia                          | 4 [3.0]  | 12 [3.1]  | 7 [2.9]   | 7 [2.7]  | 6 [3.0]  |
| Myelofibrosis                        | 2 [2.5]  |           |           | 1 [2.0]  | 2 [3.0]  |
| Lymph Node                           | (14)     | (7)       | (6)       | (11)     | (9)      |
| Deep Cervical, Ectasia               |          |           |           |          | 2 [3.5]  |
| Deep Cervical, Hyperplasia, Lymphoid |          |           |           |          | 2 [2.0]  |
| Mediastinal, Ectasia                 | 2 [3.0]  | 1 [4.0]   |           | 1 [4.0]  | 1 [3.0]  |
| Mediastinal, Hemorrhage              | 1 [2.0]  | 2 [1.5]   | 1 [2.0]   | 1 [2.0]  | 1 [1.0]  |
| Mediastinal, Hyperplasia, Lymphoid   | 1 [2.0]  | 1 [2.0]   | 1 [3.0]   | 3 [2.7]  | 2 [2.5]  |
| Mediastinal, Pigmentation            |          |           | 1 [2.0]   |          |          |
| Lymph Node, Mandibular               | (0)      | (0)       | (5)       | (2)      | (2)      |
| Ectasia                              |          |           | 1 [2.0]   | 1 [3.0]  | 2 [2.5]  |
| Lymph Node, Mesenteric               | (49)     | (50)      | (49)      | (50)     | (49)     |
| Hemorrhage                           | 2 [1.5]  | 7 [1.1]   | 9 [1.3]   | 8 [1.1]  | 17 [1.3] |
| Hyperplasia, Lymphoid                | 1 [2.0]  | 6 [2.2]   | 2 [2.0]   | 1 [2.0]  |          |
| Infiltration Cellular, Histiocyte    | 13 [2.0] | 11 [1.5]  | 30 [1.9]  | 39 [2.1] | 41 [2.1] |
| Lymph Node, Pancreatic               | (32)     | (34)      | (34)      | (36)     | (33)     |
| Congestion                           |          |           | 1 [3.0]   |          |          |
| Ectasia                              | 1 [4.0]  | 1 [3.0]   | 1 [3.0]   |          |          |
| Hemorrhage                           |          | 3 [1.0]   | 4 [2.8]   | 2 [1.5]  | 1 [1.0]  |
| Hyperplasia, Lymphoid                |          |           |           |          | 1 [2.0]  |
| Infiltration Cellular, Histiocyte    | 17 [2.0] | 22 [1.6]  | 17 [2.0]  | 17 [2.1] | 25 [2.1] |
| Pigmentation                         |          |           | 1 [2.0]   | 1 [2.0]  |          |
| Spleen                               | (50)     | (50)      | (49)      | (50)     | (49)     |
| Accessory Spleen                     | 1        |           | 2         | 1        |          |
| Fibrosis                             | 2 [2.5]  | 3 [2.3]   | 2 [2.0]   | 1 [3.0]  |          |
| Hematopoietic Cell Proliferation     | 18 [1.9] | 25 [1.8]  | 20 [1.9]  | 20 [1.8] | 16 [2.0] |
| Hemorrhage                           |          |           | 1 [4.0]   | 1 [3.0]  | 1 [2.0]  |
| Metaplasia, Lipocyte                 | 1 [2.0]  |           |           |          |          |
| Necrosis                             | 4 [2.8]  |           | 4 [3.8]   | 2 [3.0]  |          |
| Pigmentation                         | 3 [2.7]  | 2 [3.5]   | 1 [4.0]   |          | 3 [3.3]  |
| Lymphoid Follicle, Atrophy           | 1 [3.0]  |           |           |          |          |
| Lymphoid Follicle, Hyperplasia       |          | 1 [2.0]   |           |          |          |
| Thymus                               | (48)     | (50)      | (46)      | (49)     | (47)     |
| Atrophy                              |          | 1 [3.0]   | 1 [4.0]   |          | 1 [3.0]  |

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|-----------------------------|----------|-----------|-----------|----------|----------|
| INTEGUMENTARY SYSTEM        |          |           |           |          |          |
| Mammary Gland               | (50)     | (49)      | (48)      | (50)     | (49)     |
| Hyperplasia                 | 25 [2.6] | 17 [2.4]  | 19 [2.9]  | 11 [2.2] | 14 [2.6] |
| Inflammation, Granulomatous |          |           |           | 1 [3.0]  |          |
| Skin                        | (50)     | (50)      | (49)      | (50)     | (49)     |
| Angiectasis                 |          |           |           | 1 [4.0]  | 1 [4.0]  |
| Cyst                        | 1 [3.0]  |           |           | 1 [4.0]  |          |
| Cyst Epithelial Inclusion   | 5        | 3         | 2         | 3        | 6        |
| Edema                       |          |           | 1 [3.0]   |          |          |
| Hyperkeratosis              | 5 [3.0]  | 2 [2.5]   | 1 [3.0]   | 4 [2.5]  | 1 [2.0]  |
| Epidermis, Hyperplasia      |          |           | 1 [3.0]   | 1 [2.0]  |          |
| MUSCULOSKELETAL SYSTEM      |          |           |           |          |          |
| Bone                        | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cranium, Osteopetrosis      | 1 [2.0]  |           | 2 [2.5]   | 1 [2.0]  |          |
| Femur, Osteopetrosis        |          |           |           |          | 1 [3.0]  |
| Skeletal Muscle             | (3)      | (2)       | (2)       | (0)      | (1)      |
| Atrophy                     |          |           |           |          | 1 [1.0]  |
| NERVOUS SYSTEM              |          |           |           |          |          |
| Brain                       | (50)     | (50)      | (49)      | (50)     | (49)     |
| Compression                 | 7 [3.1]  | 6 [3.3]   | 9 [3.4]   | 3 [3.0]  | 3 [3.3]  |
| Hemorrhage                  | 1 [1.0]  |           |           |          |          |
| Hydrocephalus               |          | 1 [2.0]   |           |          | 1 [2.0]  |
| Peripheral Nerve            | (4)      | (6)       | (5)       | (2)      | (5)      |
| Atrophy                     |          | 1 [1.0]   |           |          |          |
| Spinal Cord                 | (4)      | (6)       | (5)       | (2)      | (5)      |
| Vacuolization Cytoplasmic   | 1 [3.0]  |           |           |          |          |
| RESPIRATORY SYSTEM          |          |           |           |          |          |
| Lung                        | (50)     | (50)      | (49)      | (50)     | (49)     |
| Edema                       | 1 [2.0]  |           |           |          |          |
| Foreign Body                |          |           |           |          | 1        |
| Hemorrhage                  | 10 [1.1] | 7 [1.1]   | 7 [1.3]   | 6 [1.3]  | 8 [1.4]  |

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b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

CAS Number: 7789-12-0

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS MALE                           | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|---|----------|-----------|-----------|----------|----------|
| Infiltration Cellular, Histiocyte               | 28 [1.4] | 27 [1.1]  | 32 [1.0]  | 29 [1.1] | 33 [1.1] |
| Inflammation, Suppurative                       |          |           |           | 1 [1.0]  | 1 [1.0]  |
| Inflammation, Granulomatous                     |          | 1 [3.0]   |           |          |          |
| Inflammation, Chronic                           | 1 [1.0]  |           |           | 1 [1.0]  | 1 [3.0]  |
| Metaplasia, Osseous                             |          | 1 [1.0]   | 1 [2.0]   | 1 [1.0]  | 1 [1.0]  |
| Thrombosis                                      | 1 [1.0]  | 1 [2.0]   |           | 1 [1.0]  |          |
| Alveolar Epithelium, Hyperplasia                | 11 [1.8] | 6 [1.7]   | 4 [2.5]   | 8 [1.5]  | 5 [1.4]  |
| Alveolar Epithelium, Metaplasia,<br>Squamous    |          |           | 1 [3.0]   |          |          |
| Nose  | (50)     | (50)      | (49)      | (50)     | (49)     |
| Foreign Body                                    | 9        | 11        | 9         | 15       | 1        |
| Hemorrhage                                      |          | 1 [3.0]   |           |          |          |
| Inflammation, Chronic                           | 8 [1.6]  | 11 [1.6]  | 8 [1.8]   | 16 [2.1] | 7 [1.4]  |
| Thrombosis                                      | 1 [4.0]  |           |           |          |          |
| Nasolacrimal Duct, Cyst                         |          |           |           | 2 [3.5]  | 1 [3.0]  |
| Respiratory Epithelium, Hyperplasia             | 5 [1.6]  | 5 [1.6]   | 4 [1.8]   | 11 [1.8] | 4 [1.5]  |
| Respiratory Epithelium, Metaplasia,<br>Squamous |          | 1 [2.0]   |           | 3 [2.3]  | 1 [1.0]  |
| SPECIAL SENSES SYSTEM                           |          |           |           |          |          |
| Eye   | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cataract  | 1 [2.0]  | 3 [3.0]   | 2 [3.0]   | 1 [3.0]  | 3 [3.0]  |
| Hemorrhage                                      |          |           |           |          | 1 [3.0]  |
| Inflammation, Chronic                           |          | 1 [1.0]   |           |          | 3 [3.0]  |
| Cornea, Hyperplasia                             |          |           |           |          | 1 [2.0]  |
| Retina, Degeneration                            | 2 [3.0]  | 3 [2.7]   | 4 [2.8]   | 2 [3.0]  | 4 [3.5]  |
| Harderian Gland                                 | (50)     | (50)      | (49)      | (50)     | (49)     |
| Inflammation, Chronic                           | 2 [2.5]  | 1 [2.0]   |           |          |          |
| Pigmentation                                    |          |           |           |          | 1 [4.0]  |
| URINARY SYSTEM                                  |          |           |           |          |          |
| Kidney  | (50)     | (50)      | (49)      | (50)     | (49)     |
| Cyst  |          | 2 [3.0]   | 1 [3.0]   | 4 [3.0]  | 1 [3.0]  |
| Hydronephrosis                                  |          |           |           |          | 1 [3.0]  |
| Infarct   |          |           |           | 1 [2.0]  |          |
| Infiltration Cellular, Lipocyte                 |          |           | 1 [3.0]   |          |          |
| Inflammation, Chronic                           | 5 [2.6]  | 9 [2.3]   | 8 [2.1]   | 2 [3.0]  | 2 [1.5]  |

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Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

CAS Number: 7789-12-0

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS MALE                       | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|---|----------|-----------|-----------|----------|----------|
| Nephropathy                                 | 45 [1.8] | 43 [2.1]  | 45 [2.0]  | 43 [1.5] | 41 [1.6] |
| Renal Tubule, Accumulation, Hyaline Droplet |          |           | 2 [3.0]   |          |          |
| Renal Tubule, Dilatation                    |          |           | 3 [2.7]   |          | 1 [2.0]  |
| Renal Tubule, Hyperplasia                   |          |           |           | 2 [1.0]  |          |
| Renal Tubule, Necrosis                      | 2 [1.0]  | 1 [3.0]   | 1 [2.0]   | 1 [2.0]  | 1 [3.0]  |
| Renal Tubule, Pigmentation                  | 5 [3.0]  | 1 [2.0]   | 1 [3.0]   |          | 3 [2.7]  |
| Transitional Epithelium, Hyperplasia        |          |           | 1 [3.0]   |          |          |
| Urinary Bladder                             | (50)     | (50)      | (49)      | (50)     | (49)     |
| Calculus Micro Observation Only             |          |           | 1         |          |          |
| Edema                                       |          |           | 1 [3.0]   |          |          |
| Hemorrhage                                  |          | 1 [3.0]   | 1 [2.0]   |          |          |
| Inflammation, Chronic                       |          |           | 1 [3.0]   |          |          |
| Necrosis                                    |          | 1 [3.0]   |           |          |          |
| Transitional Epithelium, Hyperplasia        |          | 1 [2.0]   |           |          | 1 [2.0]  |

\*\*\* END OF MALE \*\*\*

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Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

CAS Number: 7789-12-0

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE           | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|-----------------------------------|----------|-----------|-----------|----------|----------|
| <b>Disposition Summary</b>        |          |           |           |          |          |
| Animals Initially in Study        | 50       | 50        | 50        | 50       | 50       |
| Early Deaths                      |          |           |           |          |          |
| Moribund Sacrifice                | 12       | 15        | 9         | 10       | 18       |
| Natural Death                     | 5        | 3         | 9         | 4        | 1        |
| Survivors                         |          |           |           |          |          |
| Natural Death                     | 1        |           |           |          |          |
| Terminal Sacrifice                | 32       | 32        | 32        | 36       | 31       |
| Animals Examined Microscopically  | 50       | 50        | 50        | 50       | 50       |
| <b>ALIMENTARY SYSTEM</b>          |          |           |           |          |          |
| Intestine Large, Cecum            | (46)     | (47)      | (48)      | (47)     | (50)     |
| Edema                             | 2 [2.0]  | 1 [2.0]   | 1 [2.0]   |          | 1 [2.0]  |
| Hemorrhage                        |          |           | 1 [2.0]   |          |          |
| Intestine Large, Colon            | (49)     | (49)      | (49)      | (48)     | (50)     |
| Intestine Small, Duodenum         | (46)     | (49)      | (48)      | (46)     | (50)     |
| Infiltration Cellular, Histiocyte |          |           | 1 [1.0]   | 30 [1.0] | 47 [1.2] |
| Intestine Small, Ileum            | (45)     | (47)      | (44)      | (47)     | (50)     |
| Lymphatic, Hyperplasia            |          |           |           | 1 [3.0]  |          |
| Lymphoid Tissue, Hyperplasia      | 16 [1.8] | 10 [1.7]  | 8 [1.9]   | 6 [1.7]  | 12 [1.3] |
| Intestine Small, Jejunum          | (46)     | (46)      | (44)      | (45)     | (49)     |
| Liver                             | (50)     | (50)      | (50)      | (50)     | (50)     |
| Angiectasis                       | 1 [2.0]  | 4 [2.5]   | 2 [2.5]   |          |          |
| Basophilic Focus                  | 45       | 41        | 44        | 47       | 43       |
| Clear Cell Focus                  | 7        | 5         | 7         | 20       | 7        |
| Eosinophilic Focus                | 5        | 5         | 5         | 3        | 3        |
| Fatty Change                      | 3 [3.3]  | 7 [3.6]   | 10 [2.5]  | 13 [2.5] | 16 [2.8] |
| Hematopoietic Cell Proliferation  | 1 [1.0]  | 2 [1.5]   |           | 3 [1.3]  |          |
| Hemorrhage                        |          | 1 [3.0]   | 1 [1.0]   | 1 [2.0]  |          |
| Hepatodiaphragmatic Nodule        | 5        | 3         | 9         | 10       | 9        |
| Infiltration Cellular, Histiocyte | 1 [1.0]  | 5 [1.0]   | 21 [1.3]  | 42 [2.0] | 47 [2.6] |
| Inflammation, Chronic             | 12 [1.3] | 21 [1.2]  | 28 [1.3]  | 35 [1.6] | 39 [2.1] |
| Mixed Cell Focus                  | 9        | 6         | 10        | 20       | 18       |
| Necrosis                          | 5 [1.2]  | 7 [1.9]   | 4 [1.0]   |          | 1 [1.0]  |
| Regeneration                      |          | 1         | 1         |          |          |
| Bile Duct, Hyperplasia            | 2 [2.0]  |           | 5 [1.2]   | 3 [1.7]  | 4 [2.0]  |

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Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

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Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE          | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|----------------------------------|----------|-----------|-----------|----------|----------|
| Centrilobular, Necrosis          | 4 [2.0]  | 2 [2.0]   | 1 [3.0]   | 2 [2.0]  |          |
| Hepatocyte, Syncytial Alteration |          |           |           | 1 [1.0]  | 1 [2.0]  |
| Kupffer Cell, Pigmentation       | 1 [2.0]  | 1 [2.0]   |           |          |          |
| Lymphatic, Infiltration Cellular |          |           |           | 1 [2.0]  |          |
| Mesentery                        | (11)     | (13)      | (12)      | (15)     | (10)     |
| Accessory Spleen                 |          | 1         |           | 1        | 1        |
| Fat, Necrosis                    | 11 [2.5] | 10 [3.4]  | 11 [2.5]  | 12 [2.8] | 9 [2.9]  |
| Oral Mucosa                      | (50)     | (50)      | (50)      | (50)     | (50)     |
| Pancreas                         | (50)     | (50)      | (50)      | (50)     | (50)     |
| Atrophy                          | 6 [1.7]  | 12 [1.6]  | 11 [1.5]  | 9 [1.4]  | 5 [1.6]  |
| Cyst                             | 2 [3.0]  | 4 [3.0]   | 3 [3.0]   | 6 [3.0]  | 4 [3.0]  |
| Acinus, Cytoplasmic Alteration   |          |           |           |          | 3 [3.0]  |
| Acinus, Hyperplasia, Focal       | 1 [1.0]  |           | 1 [3.0]   |          | 1 [1.0]  |
| Salivary Glands                  | (50)     | (50)      | (50)      | (50)     | (50)     |
| Atrophy                          | 9 [1.3]  | 7 [1.4]   | 10 [1.2]  | 17 [1.4] | 17 [2.1] |
| Fibrosis                         |          | 1 [1.0]   |           |          |          |
| Vacuolization Cytoplasmic        |          | 1 [2.0]   |           |          |          |
| Stomach, Forestomach             | (50)     | (50)      | (50)      | (50)     | (50)     |
| Edema                            | 1 [3.0]  | 3 [2.0]   | 1 [3.0]   | 2 [3.5]  | 2 [3.0]  |
| Erosion                          |          |           | 1 [2.0]   | 1 [1.0]  | 1 [3.0]  |
| Inflammation, Chronic Active     |          |           |           |          | 1 [3.0]  |
| Ulcer                            | 2 [3.5]  | 3 [2.3]   | 2 [3.5]   | 2 [4.0]  | 3 [3.3]  |
| Epithelium, Hyperplasia          | 2 [2.5]  | 3 [2.0]   | 4 [2.8]   | 4 [2.0]  | 4 [2.8]  |
| Stomach, Glandular               | (50)     | (50)      | (50)      | (50)     | (50)     |
| Edema                            |          |           | 1 [3.0]   | 1 [2.0]  | 1 [2.0]  |
| Erosion                          | 2 [2.5]  | 3 [2.7]   | 2 [2.0]   | 1 [3.0]  | 5 [2.2]  |
| Hyperplasia                      | 4 [1.0]  | 6 [1.0]   | 4 [1.3]   | 7 [1.0]  | 4 [1.3]  |
| Inflammation                     |          |           |           |          | 1 [2.0]  |
| Ulcer                            | 1 [2.0]  | 2 [2.5]   | 1 [3.0]   | 1 [2.0]  | 2 [2.5]  |
| Glands, Dilatation               |          |           | 1 [2.0]   |          |          |
| Tongue                           | (45)     | (49)      | (48)      | (48)     | (48)     |
| Granuloma                        |          |           |           |          | 2        |
| Hemorrhage                       |          | 1 [1.0]   |           |          | 1 [1.0]  |
| Inflammation, Chronic            | 8 [1.0]  | 3 [1.0]   | 4 [1.0]   | 14 [1.0] | 12 [1.1] |
| Ulcer                            |          |           |           |          | 3 [2.0]  |
| Epithelium, Hyperplasia          | 1 [2.0]  | 1 [4.0]   | 1 [1.0]   |          |          |

## CARDIOVASCULAR SYSTEM

a - Number of animals examined microscopically at site and number of animals with lesion

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Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

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Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE                         | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|---|----------|-----------|-----------|----------|----------|
| Heart   | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cardiomyopathy                                  | 27 [1.7] | 32 [2.0]  | 35 [1.5]  | 33 [1.5] | 28 [1.3] |
| Inflammation, Chronic                           |          | 1 [3.0]   |           |          |          |
| Necrosis  |          |           | 1 [3.0]   |          |          |
| Thrombosis                                      | 1 [3.0]  | 1 [3.0]   | 2 [2.5]   | 1 [1.0]  |          |
| ENDOCRINE SYSTEM                                |          |           |           |          |          |
| Adrenal Cortex                                  | (50)     | (50)      | (50)      | (50)     | (50)     |
| Accessory Adrenal Cortical Nodule               | 6 [3.0]  | 9 [3.0]   | 10 [3.0]  | 6 [3.0]  | 8 [3.0]  |
| Angiectasis                                     | 1 [4.0]  | 1 [3.0]   |           |          |          |
| Degeneration, Fatty                             | 12 [2.1] | 12 [2.1]  | 17 [1.8]  | 14 [2.1] | 20 [2.0] |
| Hyperplasia, Focal                              | 2 [2.0]  | 6 [1.7]   | 8 [1.5]   | 12 [1.7] | 6 [1.3]  |
| Hypertrophy                                     | 1 [2.0]  |           |           |          |          |
| Hypertrophy, Focal                              | 4 [1.5]  | 4 [1.3]   | 6 [1.5]   | 1 [2.0]  | 7 [1.7]  |
| Necrosis  | 3 [2.3]  |           |           | 2 [3.0]  |          |
| Adrenal Medulla                                 | (49)     | (50)      | (49)      | (50)     | (50)     |
| Hyperplasia                                     | 2 [1.0]  | 3 [2.3]   | 1 [1.0]   | 2 [1.0]  | 2 [1.0]  |
| Islets, Pancreatic                              | (50)     | (50)      | (50)      | (50)     | (50)     |
| Hyperplasia                                     |          |           | 1 [2.0]   |          |          |
| Parathyroid Gland                               | (46)     | (47)      | (47)      | (45)     | (47)     |
| Hyperplasia                                     |          | 1 [2.0]   |           |          | 1 [2.0]  |
| Pituitary Gland                                 | (50)     | (50)      | (50)      | (50)     | (49)     |
| Pars Distalis, Angiectasis                      | 11 [3.1] | 6 [2.3]   | 7 [2.9]   | 4 [2.3]  | 3 [2.7]  |
| Pars Distalis, Cyst                             | 18 [3.0] | 18 [3.0]  | 18 [3.0]  | 18 [3.0] | 27 [3.0] |
| Pars Distalis, Cytoplasmic Alteration,<br>Focal |          |           |           | 1 [1.0]  |          |
| Pars Distalis, Hyperplasia                      |          |           |           |          | 1 [3.0]  |
| Pars Distalis, Hyperplasia, Focal               | 9 [2.4]  | 8 [2.0]   | 9 [2.1]   | 8 [2.4]  | 10 [2.0] |
| Pars Intermedia, Angiectasis                    | 1 [2.0]  | 2 [2.5]   |           |          |          |
| Pars Intermedia, Cyst                           | 1 [3.0]  | 3 [3.0]   | 1 [3.0]   | 1 [3.0]  | 3 [3.0]  |
| Thyroid Gland                                   | (50)     | (50)      | (50)      | (50)     | (50)     |
| Ultimobranchial Cyst                            |          |           | 2 [3.0]   |          | 2 [3.0]  |
| C-cell, Hyperplasia                             | 28 [1.6] | 28 [1.5]  | 25 [1.8]  | 23 [1.5] | 16 [1.3] |
| Follicle, Cyst                                  |          | 1 [3.0]   |           |          |          |
| GENERAL BODY SYSTEM                             |          |           |           |          |          |
| Tissue NOS                                      | (0)      | (0)       | (0)       | (0)      | (2)      |

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Sodium dichromate dihydrate (VI)

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Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE            | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|------------------------------------|----------|-----------|-----------|----------|----------|
| GENITAL SYSTEM                     |          |           |           |          |          |
| Clitoral Gland                     | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cyst                               | 2 [3.0]  |           | 2 [3.0]   | 4 [3.0]  | 1 [3.0]  |
| Hyperplasia                        | 4 [1.8]  | 1 [2.0]   | 2 [2.5]   | 3 [2.0]  | 1 [3.0]  |
| Inflammation                       |          |           |           | 1 [3.0]  |          |
| Inflammation, Chronic              | 3 [2.3]  | 4 [2.3]   | 6 [2.3]   | 8 [2.5]  | 4 [2.0]  |
| Ovary                              | (49)     | (50)      | (50)      | (50)     | (50)     |
| Angiectasis                        |          | 1 [3.0]   |           | 1 [3.0]  |          |
| Cyst                               | 9 [3.0]  | 6 [3.0]   | 7 [3.0]   | 10 [3.0] | 5 [3.0]  |
| Uterus                             | (49)     | (50)      | (50)      | (50)     | (50)     |
| Angiectasis                        |          |           |           |          | 2 [2.5]  |
| Dilatation                         |          | 1 [4.0]   |           |          |          |
| Hemorrhage                         |          | 1 [4.0]   |           |          |          |
| Hyperplasia, Cystic                | 5 [2.6]  | 5 [1.8]   | 4 [2.3]   | 9 [2.2]  | 5 [2.8]  |
| Inflammation, Chronic              |          |           |           | 1 [2.0]  |          |
| Vagina                             | (8)      | (12)      | (4)       | (4)      | (10)     |
| Angiectasis                        | 1 [3.0]  |           |           |          |          |
| HEMATOPOIETIC SYSTEM               |          |           |           |          |          |
| Bone Marrow                        | (50)     | (50)      | (49)      | (50)     | (50)     |
| Hyperplasia                        | 6 [3.0]  | 8 [2.6]   | 7 [2.7]   | 6 [3.0]  | 9 [2.6]  |
| Infiltration Cellular, Histiocyte  | 1 [4.0]  |           | 2 [3.0]   |          |          |
| Myelofibrosis                      |          | 1 [4.0]   |           | 1 [2.0]  | 1 [3.0]  |
| Lymph Node                         | (8)      | (11)      | (9)       | (4)      | (11)     |
| Hemorrhage                         | 1 [2.0]  |           |           | 1 [2.0]  |          |
| Hyperplasia, Lymphoid              |          |           |           | 1 [2.0]  |          |
| Deep Cervical, Hemorrhage          | 1 [2.0]  |           | 1 [3.0]   |          |          |
| Mediastinal, Ectasia               |          | 1 [3.0]   |           |          | 2 [3.0]  |
| Mediastinal, Hemorrhage            | 3 [2.7]  | 4 [2.5]   | 2 [2.5]   | 3 [2.0]  | 4 [2.8]  |
| Mediastinal, Hyperplasia, Lymphoid | 2 [2.0]  | 5 [2.4]   | 2 [2.0]   | 1 [2.0]  | 6 [2.5]  |
| Mediastinal, Pigmentation          | 1 [4.0]  | 4 [2.3]   |           | 2 [2.0]  | 1 [2.0]  |
| Lymph Node, Mandibular             | (4)      | (0)       | (3)       | (2)      | (3)      |
| Ectasia                            |          |           |           |          | 1 [3.0]  |
| Lymph Node, Mesenteric             | (50)     | (50)      | (50)      | (50)     | (50)     |
| Fibrosis                           |          |           | 1 [3.0]   |          |          |
| Hemorrhage                         | 11 [1.1] | 13 [1.3]  | 16 [1.3]  | 14 [1.1] | 21 [1.3] |

a - Number of animals examined microscopically at site and number of animals with lesion

b - Average severity grade (1-minimal; 2-mild; 3-moderate; 4-marked)

Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

CAS Number: 7789-12-0

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE           | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|-----------------------------------|----------|-----------|-----------|----------|----------|
| Hyperplasia, Lymphoid             |          |           | 2 [2.0]   |          |          |
| Hyperplasia, Reticulum Cell       |          |           | 1 [3.0]   |          | 1 [2.0]  |
| Infiltration Cellular, Histiocyte | 21 [1.7] | 18 [1.4]  | 27 [1.5]  | 36 [2.0] | 42 [2.4] |
| Lymph Node, Pancreatic            | (29)     | (36)      | (30)      | (34)     | (33)     |
| Hemorrhage                        | 3 [2.3]  |           | 2 [2.0]   |          | 4 [1.5]  |
| Hyperplasia, Lymphoid             |          |           |           |          | 2 [2.5]  |
| Infiltration Cellular, Histiocyte | 17 [2.0] | 20 [1.9]  | 23 [2.6]  | 32 [2.8] | 27 [3.0] |
| Pigmentation                      | 2 [3.0]  |           |           |          | 1 [3.0]  |
| Spleen                            | (50)     | (50)      | (50)      | (50)     | (50)     |
| Accessory Spleen                  |          |           | 1         |          | 1        |
| Fibrosis                          |          | 2 [3.0]   |           |          |          |
| Hematopoietic Cell Proliferation  | 36 [2.2] | 28 [2.3]  | 38 [2.1]  | 36 [2.2] | 33 [2.0] |
| Hemorrhage                        |          |           | 1 [4.0]   |          | 1 [3.0]  |
| Infiltration Cellular, Mixed Cell |          |           | 3 [4.0]   |          |          |
| Necrosis                          |          | 3 [3.0]   | 1 [4.0]   | 1 [3.0]  | 2 [3.5]  |
| Pigmentation                      | 26 [3.0] | 23 [2.7]  | 13 [2.3]  | 6 [2.2]  | 3 [3.0]  |
| Lymphoid Follicle, Atrophy        |          |           |           | 1 [3.0]  | 4 [2.8]  |
| Lymphoid Follicle, Hyperplasia    |          |           | 1 [2.0]   |          | 3 [2.7]  |
| Thymus                            | (50)     | (49)      | (49)      | (48)     | (47)     |
| Atrophy                           |          |           |           |          | 3 [3.0]  |
| INTEGUMENTARY SYSTEM              |          |           |           |          |          |
| Mammary Gland                     | (50)     | (50)      | (50)      | (50)     | (50)     |
| Hyperplasia                       | 47 [3.2] | 50 [2.8]  | 45 [2.9]  | 49 [2.7] | 44 [2.7] |
| Skin                              | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cyst Epithelial Inclusion         | 1        |           |           | 1        |          |
| Edema                             |          | 1 [2.0]   |           |          |          |
| Hyperkeratosis                    |          |           | 1 [3.0]   |          |          |
| Ulcer                             |          |           | 1 [2.0]   |          |          |
| MUSCULOSKELETAL SYSTEM            |          |           |           |          |          |
| Bone                              | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cranium, Osteopetrosis            |          |           | 1 [3.0]   | 1 [2.0]  | 2 [2.0]  |
| NERVOUS SYSTEM                    |          |           |           |          |          |

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Test Type: CHRONIC

Sodium dichromate dihydrate (VI)

Time Report Requested: 10:38:19

Route: DOSED WATER

CAS Number: 7789-12-0

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE                   | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|---|----------|-----------|-----------|----------|----------|
| Brain                                     | (50)     | (50)      | (50)      | (50)     | (50)     |
| Compression                               | 8 [3.1]  | 13 [3.4]  | 15 [3.5]  | 11 [3.4] | 7 [2.9]  |
| Gliosis                                   |          |           |           |          | 1 [1.0]  |
| Hemorrhage                                | 1 [2.0]  | 3 [1.3]   |           | 1 [2.0]  |          |
| Hydrocephalus                             |          |           | 2 [2.5]   | 2 [3.0]  |          |
| Necrosis                                  |          |           |           |          | 1 [2.0]  |
| Vacuolization Cytoplasmic                 |          |           |           |          | 1 [2.0]  |
| RESPIRATORY SYSTEM                        |          |           |           |          |          |
| Larynx                                    | (0)      | (0)       | (0)       | (1)      | (1)      |
| Lung                                      | (50)     | (50)      | (50)      | (50)     | (50)     |
| Edema                                     |          |           | 1 [3.0]   |          |          |
| Foreign Body                              |          |           | 1         |          | 1        |
| Hemorrhage                                | 2 [1.5]  | 4 [1.3]   | 4 [1.8]   | 1 [1.0]  | 2 [1.0]  |
| Infiltration Cellular, Histiocyte         | 45 [1.4] | 48 [1.4]  | 42 [1.4]  | 46 [1.3] | 47 [1.5] |
| Inflammation, Chronic                     | 2 [1.5]  | 1 [2.0]   | 3 [1.7]   |          | 1 [3.0]  |
| Alveolar Epithelium, Hyperplasia          | 11 [1.6] | 7 [1.6]   | 12 [1.7]  | 9 [1.6]  | 10 [2.0] |
| Alveolar Epithelium, Metaplasia, Squamous |          |           |           |          | 1 [2.0]  |
| Nose                                      | (50)     | (50)      | (50)      | (50)     | (50)     |
| Foreign Body                              | 3        | 1         | 1         | 1        | 3        |
| Inflammation, Chronic                     | 3 [1.3]  | 2 [1.5]   |           | 3 [1.3]  | 3 [2.0]  |
| Nasolacrimal Duct, Cyst                   |          | 1 [3.0]   |           |          |          |
| Respiratory Epithelium, Hyperplasia       | 1 [1.0]  | 1 [2.0]   | 1 [1.0]   | 1 [2.0]  | 2 [1.0]  |
| SPECIAL SENSES SYSTEM                     |          |           |           |          |          |
| Eye                                       | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cataract                                  | 2 [3.0]  | 2 [2.0]   | 4 [3.0]   | 1 [3.0]  | 1 [4.0]  |
| Inflammation, Chronic                     |          |           |           |          | 3 [4.0]  |
| Retina, Degeneration                      | 4 [2.8]  | 2 [3.5]   | 3 [4.0]   | 2 [2.5]  | 2 [3.0]  |
| Harderian Gland                           | (50)     | (50)      | (50)      | (50)     | (50)     |
| Hemorrhage                                |          |           |           |          | 1 [4.0]  |
| Inflammation, Chronic                     |          |           |           | 1 [3.0]  |          |
| Zymbal's Gland                            | (1)      | (0)       | (0)       | (0)      | (1)      |

## URINARY SYSTEM

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Test Type: CHRONIC

Time Report Requested: 10:38:19

Route: DOSED WATER

First Dose M/F: 10/02/02 / 10/02/02

Species/Strain: RATS/F 344

Lab: SRI

| FISCHER 344 RATS FEMALE                        | 0 MG/L   | 14.3 MG/L | 57.3 MG/L | 172 MG/L | 516 MG/L |
|--|----------|-----------|-----------|----------|----------|
| Kidney   | (50)     | (50)      | (50)      | (50)     | (50)     |
| Cyst   |          |           |           | 1 [3.0]  | 2 [3.0]  |
| Glomerulosclerosis                             |          |           |           | 1 [1.0]  |          |
| Hydronephrosis                                 |          |           |           | 1 [1.0]  |          |
| Infarct  | 3 [3.0]  | 1 [3.0]   | 1 [3.0]   | 1 [4.0]  | 4 [2.3]  |
| Inflammation, Chronic                          | 2 [2.0]  | 1 [2.0]   | 1 [2.0]   |          | 1 [3.0]  |
| Nephropathy                                    | 33 [1.1] | 23 [1.1]  | 32 [1.4]  | 37 [1.2] | 41 [1.2] |
| Renal Tubule, Accumulation, Hyaline<br>Droplet | 7 [3.0]  | 4 [3.0]   | 2 [2.5]   | 2 [2.5]  |          |
| Renal Tubule, Dilatation                       |          |           |           | 1 [3.0]  |          |
| Renal Tubule, Necrosis                         | 3 [3.0]  | 2 [3.0]   |           |          |          |
| Renal Tubule, Pigmentation                     | 2 [2.0]  | 1 [3.0]   | 1 [4.0]   |          | 2 [2.0]  |
| Transitional Epithelium, Hyperplasia           | 3 [2.3]  | 2 [2.0]   | 2 [2.5]   |          | 1 [2.0]  |
| Urinary Bladder                                | (49)     | (50)      | (50)      | (50)     | (49)     |
| Hemorrhage                                     |          |           | 1 [4.0]   |          |          |

\*\*\* END OF REPORT \*\*\*

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