03.13-04/29/94.00540

APPENDIX A

VOLUME III

SUPPLEMENTAL INVESTIGATION

INSTALLATION RESTORATION PROGRAM ACTIVITIES

NAVAL STATION ROOSEVELT ROADS CEIBA, PUERTO RICO

CONTRACT TASK ORDER 0007

APRIL 29, 1994

Prepared For:

DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
Norfolk, Virginia

Under the:

LANTDIV CLEAN Program
Contract N62470-89-D-4814

Prepared By:

BAKER ENVIRONMENTAL, INC.
Coraopolis, Pennsylvania

TABLE OF CONTENTS

5.A Toxicological Profiles
5.B Target Level Calculations

APPENDIX 5.A

TOXICOLOGICAL PROFILES

TOXICITY PROFILE LISTING

Aldrin

Arsenic

Barium

Benzene

Chlordane

Copper

4,4'-DDT

Hexachlorocyclohexane (BHC)

Lead

Polychlorinated Biphenyls (PCBs)

Polynuclear Aromatic Hydrocarbons (PAHs)

Toluene

Xylene

Zinc

Date of Last Revision: 3/19/93

Revisor: Rich Hoff

ARSENIC

INTRODUCTION

Chemical Name: Arsenic

CAS Number: 7440-38-2

Molecular Formula: As

Molecular Weight: 74.92 g/mole

Chemical Structure: As

Arsenic (elemental) exists as a silvery to black, brittle, crystalline and amorphous metalloid. Arsenic is used in the production of glass, enamels, ceramics, oil, cloth, linoleum, electrical semiconductors, pigments, fireworks, pesticides, fungicides, veterinary pharmaceuticals and wood preservatives. Arsenic also has been shown to occur in municipal sewage (7).

FATE AND TRANSPORT

BCF (1): Accumulates to toxic levels in food chain organisms

Degradation Products: None

Solubility:

In Water (5): Insoluble

In Organics (6): Unknown (5); soluble in nitric acid

Vapor Pressure (6): 1 mm Hg @ 372° C (sublimes)

Specific Gravity (5): 5.727

Arsenic can occur in soil, water, or air. Since it is an element, it cannot be degraded by environmental processes. However, transformation from one arsenic compound to another is possible.

In the environment, arsenic can occur in four different oxidation states (-3, 0, +3, +5). The particular chemical speciation is important in determining mobility. Interconversions between the +3 and +5 states, as well as organic complexation, are most important (8).

In the soil, the concentration and chemical form in which arsenic occurs is affected by pH, soil type and iron and aluminum content of the soil. Lowered pH and reducing conditions tend to favor the development of arsine, a toxic gas comprised of arsenic and oxygen (7).

In the aquatic environment, volatilization is an important mechanism when biological activity or highly reducing conditions favor the production of arsine or methylarsenics. Sorption of arsenic onto sediments is also an important process in aquatic transport processes. While arsenic may cycle considerably in the environment given its mobility, the deep ocean probably serves as a sink for most inorganic arsenic (7).

PHARMACOKINETICS

Human and animal studies have shown that gastrointestinal absorption of arsenic is very high (>90 to 95 percent). Absorption of arsenic via the inhalation and dermal routes is limited in both animal and human studies. In terms of the developing fetus, inorganic arsenic has been shown to rapidly cross the transplacental barrier after oral administration to mice and rats (5).

Most animals and humans tend to clear arsenic rapidly from the blood and other tissues (including the liver, kidneys, and lungs). Arsenic has been shown to be retained in the brain of experimental animals (5). Arsenic has a tendency to accumulate in the skin and desquamous tissues, such as hair and nails of animals (2).

The main route of excretion for absorbed arsenic is via the urine. Studies demonstrate that only six to nine percent of ingested arsenic appears in the feces, indicating nearly complete gastrointestinal absorption of the metal. The biologiccal half-life is on the order of ten hours, with 50 to 80 percent excreted in about three days (2).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

Trivalent compounds of arsenic are the principal toxic forms. Arsenic's principal mode of toxic action is at the cellular level, where it affects mitochondrial enzymes that are critical in tissue respiration (2).

Ingestion of large doses of arsenic can be acutely fatal. Symptoms include fever, anorexia, cardiac arrhythmia and eventual cardiovascular failure. Additionally, central nervous system (CNS) effects, including peripheral neuropathy and sensory loss, are usually noted (2).

Chronic long-term exposure is characterized by liver injury. This is usually reflected as jaundice, and may progress to cirrhosis. Also, peripheral vascular disease has been observed in persons chronically exposed to arsenic (2).

USEPA has established an oral RfD of 3×10^{-4} mg/kg/day for arsenic. This is based on keratosis and hyperpigmentation (1).

Carcinogenic Effects

Arsenic has been implicated as a carcinogen by the inhalation route in both animal and human studies.

Studies of populations living near arsenic-using pesticide manufacturing plants were shown to have an increased incidence of lung cancer. Also, case reports of arsenical pesticide applicators have demonstrated an association between arsenic exposure and lung cancer (1).

Evidence for the carcinogenicity of arsenic via oral exposure comes from an epidemiological study where an arsenic-contaminated water supply was associated with a significant increase in cancer of the bladder, lung, liver, kidney, skin and colon (1).

Because of arsenic's carcinogenic potential in humans, the EPA has classified it as a Group A carcinogen-human carcinogen. The carcinogenic slope factor for arsenic by inhalation exposure is 15.03 $(mg/kg/day)^{-1}$ derived from a unit risk of 0.0043 per $\mu g/m^3$. Also, a carcinogenic slope factor of 1.75 $(mg/kg/day)^{-1}$ has been derived for ingestion exposure to this element from a unit risk of 5×10^{-5} per $\mu g/L$ (1,4).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

While various forms of inorganic arsenic seem to have roughly similar toxicities in aquatic organisms, they all seem to be much more toxic than the organic forms. Acute toxicity of adult

freshwater animals has been shown to occur at arsenic trioxide levels as low as 812 µg/L and as as low as 40 µg/L in early life stage organisms (8).

Ambient Water Quality Criteria for the protection of aquatic organisms are as follows: (1)

Freshwater:

Acute Toxicity: 3.6×10^2 µg/L (Arsenic III)

Chronic Toxicity: 1.9×10^2 µg/L (Arsenic III)

Marine:

Acute Toxicity: 6.9×10^1 µg/L (Arsenic III)

Chronic Toxicity: 3.6×10^1 µg/L (Arsenic III)

Terrestrial and Avian

Information on arsenic toxicity among terrestrial wildlife is very limited. However, arsenic poisoning has been known to occur on rare occasions in domestic animals. Arsenic poisoning in domestic animals leads to hyperemia and edema of the gastrointestinal tract, hemorrhage of the cardiac serosal surfaces and peritoneum, and pulmonary congestion and edema (8).

REGULATORY LEVELS AND CRITERIA

The following regulatory levels and criteria have been established for arsenic:

OSHA TWA workplace exposure limit (5):	10 µg/m^3
NIOSH recommended exposure ceiling for occupational exposure (5):	2 µg/m^3
MCL(1):	0.05 mg/lL
ACGIH TLV-TWA (5):	0.2 mg/m^3
EPA Ambient Water Quality Criteria (5):	
Ingestion of Water and Aquatic Organisms:	2.2×10^{-6} mg/L
Ingestion of Organisms Only:	1.75×10^{-5} mg/L

SUMMARY OF TOXICOLOGICAL INDICES

EPA Carcinogenic Classification (1):	Group A-human carcinogen
Noncarcinogenic Effects	
Oral RfD (1):	3×10^{-4} mg/kg/day
Inhalation RfC (4):	Not Determined
Carcinogenic Effects:	
Inhalation CPF (1):	15.03 $(mg/kg/day)^{-1}$
Oral CPF (1):	1.75 $(mg/kg/day)^{-1}$

REFERENCES

1. IRIS. Integrated Risk Information System. Office of Research and Development, U.S Environmental Protection Agency, Washington, D.C. 1993.

2. Klaassen, C.D., M.O. Amdur, and J. Doull, eds. Casarett and Doull's Toxicology - The Basic Science of Poisons. Third Edition. MacMillan Publishing Comany, New York, New York, 1987.

3. Hawley, G.G., The Condensed Chemical Dictionary-Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

4. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. FY-1992.

5. Toxicological Profile for Arsenic. U.S. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. January 1988.

6. Sax, N.I. and R.J. Lewis. Hazardous Chemicals Desk Reference. Van Nostrand Reinhold Company, Inc. New York, New York. 1987.

7. Hazardous Waste Land Treatment. U.S. Environmental Protection Agency. April 1983.

8. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. September 1985.

Date of Last Revision: 5/11/93

Revisor: Joy L. Marshall

BARIUM

INTRODUCTION

Chemical Name: Barium

CAS Number: 7440-39-3

Molecular Formula: Ba

Molecular Weight: 137.3 g/mole

Chemical Structure: Ba

Barium is a silvery-white, slightly lustrous, somewhat malleable metal. It is used in various alloys, paints, soap, paper, and rubber, and in the manufacture of ceramics and glass. Barium compounds also are used in diagnostic radiology (3,4).

FATE AND TRANSPORT

BCF (1): Not Significant

Solubility (1):

In Water: Decomposes; combines with sulfate present in natural waters to form $BaSO_4$, which has a solubility of 1.6 mg/L @ 20° C

In Organics: Soluble in alcohol, insoluble in benzene

Vapor Pressure: Not Reported

Specific Gravity (1): 3.5

Barium is extremely reactive, decomposes in water, and readily forms insoluble carbonate and sulfate salts. It is generally present in surface water and groundwater only in trace amounts. Barium is not soluble at more than a few parts per million in water that contains sulfate at more than a few parts per million. It is rare to find barium in drinking water at concentrations in excess of 1 mg/L (1). In terms of atmospheric transport, barium can adhere to particulates and be transported via the wind (1).

PHARMACOKINETICS

The absorption, metabolism and excretion of barium and its compounds depend upon the solubility of the specific barium compound. Insoluble forms, such as barium sulfate, are not toxic by either ingestion or inhalation. The soluble salts of barium are absorbed, and small amounts are accumulated in the skeleton (3). However, the biological half-life for barium is generally less than 24 hours (1).

The primary route of barium elimination is through the feces (3). Urinary excretion of barium occurs to a much lesser extent because it is reabsorbed by the renal tubules of the kidney.

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

Soluble salts of barium, such as barium chloride and barium carbonate, are highly toxic by exposure via ingestion or inhalation (1).

The most important effect of acute barium poisoning is a strong, prolonged stimulant action of muscle including smooth, cardiac, and skeletal muscles. This tends to lead to a transient increase in blood pressure due to vasoconstriction (1,3).

Effects on the hematopoietic system and cerebral cortex have also been reported in humans. Accidental ingestion of soluble barium salts has resulted in gastroenteritis, muscular paralysis and ventricular fibrillation (1).

Baritosis, a benign form of pneumoconiosis, is an occupational disease arising from the inhalation of barium sulfate, barium oxide, or barium carbonate dust (1,3).

The EPA has established an oral RfD for barium of 7×10^{-2} mg/kg/day, based on increased blood pressure. EPA has placed a confidence rating of "medium" on this RfD (2). An inhalation RfD of 1×10^{-4} mg/kg/day is also available. This value is based on a study involving the administration of barium chloride in drinking water to 11 male volunteers. The volunteers were given 1.5 L/day of distilled and charcoal-filtered water containing 0 mg/L barium for the first two weeks, 5 mg/L for weeks 3 to 6, and 10 mg/L for weeks 7 to 10. There were no changes in systolic or diastolic blood pressures or serum chemistry. There was an

increase in serum calcium levels that was attributed to a decrease in serum albumin levels. However, these increases were not clinically significant (2).

Carcinogenic Effects

Currently, there are no reports of carcinogenicity associated with exposure to barium (1). The EPA has not evaluated barium with respect to carcinogenic potential.

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

Information regarding the aquatic impact potential of barium was not readily available (1).

Terrestrial and Avian

Adequate data for characterization of toxicity to wildlife and domestic animals are not available (1).

REGULATORY LEVELS AND CRITERIA

Maximum Contaminant Level (MCL) (2):	2.0 mg/L
OSHA TWA - TLV (1):	0.5 mg/m3 (soluble compounds)
ACGIH TWA - TLV (1):	0.5 mg/m3 (solubme compounds)
EPA Carcinogenic Classification (2):	Group D-not classified as a carcinogen
Oral RfD (2):	7×10^{-2} mg/kg/day
Inhalation RfC(2):	Pending

REFERENCES

1. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergence Response, U.S. Environmental Protection Agency, Washington D.C. September, 1985.

2. IRIS. Integrated Risk Information System. Office of Research and Development, U.S Environmental Protection Agency, Washington, D.C. 1993.

3. Casarett L.J, and Doull, J., Toxicology-the Basic Science of Poisons-Third Edition. Macmillan Publishing Company, New York, New York. 1986.

4. Sax, N.I. and R. Lewis, Hazardous Chemicals Desk Reference. Van Nostrand Reinhold Company, Inc. New York, New York. 1987.

Date of Last Revision: 6/3/93
Revisor: Rich Hoff

COPPER

INTRODUCTION

Chemical Name: Copper
Synonyms (1): Bronze Powder, C.I. 77400
CAS Number (1): 7440-50-8
Molecular Formula: Cu
Molecular Weight (1): 63.546 g/mole
Chemical Structure:

Copper is a reddish colored metal that occurs naturally in rock, soil, water, sediment, and air. Also, copper occurs naturally in plants and animals. A concentration of approximately 50 ppm can be found in the earth's crust. Copper is considered to be ductile and an excellent conductor. The primary uses of copper consist of use as the metal or alloy in the manufacture of wire, sheet metal, pipe, and other metal products. Copper compounds occur both naturally and are man-made and exhibit a characteristic blue-green color. Copper compounds are used in agriculture to treat plant diseases, for water treatment, and as preservatives for wood, leather, and fabrics (1,2,3).

FATE AND TRANSPORT

Fish BCF (4): 200 L/kg
Solubility(3): In Water : Insoluble
Density (3): 8.92

The largest release of copper to the environment is to the land with an estimated 97% deposited to this media. Tailings and overburdens from copper mines and tailings from mills are the primary contributors. It is also released through mining operations, agriculture, solid waste, and sludge from publicly-owned treatment works. The majority of copper deposited in the soil is strongly adsorbed and remains in the upper few centimeters of soil. The copper

adsorbs to organic matter, carbonate minerals, clay minerals, or hydrous iron and manganese oxides (3).

Copper is released to water bodies primarily through natural weathering of soil and discharges from industries and sewage treatment plants. The majority of copper in water is found in the form of particulates. Approximately 2.4% of total copper released to the environment is attributed to release into a waterway. An estimated 68% of release to water is associated with natural weathering or disturbed soil. Copper sulfate use represents 13% of releases to water. Only 2% is contributed by urban runoff. The copper discharged into waterways is in the form of particulate matter. The particulate matter either settles out, precipitates out, or adsorbs in organic matter, hydrous iron and manganese oxides, and clay in sediment. When copper is present as the Cu(I) ion, it tends to disproportionate to Cu(II) and copper metal. The concentration of dissolved copper depends on factors such as pH, the oxidation-reduction potential of the water, and the presence of competing cations, anions of insoluble cupric salts and organic and inorganic complexing agents (3).

Copper emitted to the air occurs from windblown dust, volcanos, and manufacturing processes such as primary copper smelters and ore processing facilities. An estimated 0.04% of all copper released to the environment is to the air. Copper is released to the atmosphere in the form of particulate matter or adsorbed to particulate matter. Gravitational settling accounts for the removal of particles that are >5 µm while smaller particles are removed by either dry deposition or washout by rain. Deposition rates in urban areas are 0.119 and 0.164 kg/ha/yr for dry and wet deposition, respectively. It is assumed that copper transformations in the atmosphere exist as oxides. As the oxides age, sulfatization may occur (3).

PHARMACOKINETICS

No data were located that studied absorption of copper through inhalation or dermal exposure. However, via oral exposure, copper is absorbed in the stomach and small intestine. In humans, approximately 60% of an oral dose of Cu^{64} as copper acetate was absorbed from the gastrointestinal tract. Once absorbed from the gastrointestinal tract, copper forms ionic copper or binds to amino acids. The factors which may affect copper absorption include: competition with other metals, the amount of copper in the stomach, certain dietary components, and forms of copper. High dietary ascorbic acid has been shown to impair copper absorption (3).

Studies regarding distribution of copper through inhalation and dermal exposure are not available. Through oral exposure, copper is distributed by loosely binding to plasma albumen and amino acids in the portal blood and transported to the liver. Studies have also shown that copper binds to transcuprein, a plasma protein. Once in the liver, copper is incorporated into ceruloplasmin and released into the plasma (3).

Copper is metabolized mainly by its transfer to and from various organic ligands. Several binding proteins for copper have been identified that are important in the uptake, storage, and release of copper from tissues (3).

Oral exposure is the only pathway which has been studied with regard to excretion. The major pathway for the excretion of copper is through bile following oral exposure. Studies have shown that 72% of ingested radioactive copper was excreted as copper acetate in the feces. Reabsorption of biliary copper is negligible; however, a fraction of fecal copper is of endogenous biliary origin (3).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

Wilson's disease (hepatolenticular degeneration), is the only significant manifestation of copper toxicity in humans. Death has been reported upon ingestion of large amounts of copper and attributed to extensive hepatic centrilobular necrosis (3).

Systemic effects induced by copper ingestion include gastrointestinal irritation, manifested as vomiting, nausea, diarrhea, and anorexia. In individuals totally poisoned from copper, centrilobular necrosis of the liver and vecrosis and sloughing of tubular cells in the kidney have been observed (3).

Immunological effects in humans have been exhibited as allergic dermatitis upon contact with copper. Additionally, inhalation studies in mice have found that after exposure to copper, an impaired immune function is present (3).

Neurological effects are manifested as Wilson's disease. Wilson's disease affects the central nervous system and includes symptoms of poor coordination, psychological impairment,

tremor, disturbed gait, and rigidity. Increased copper levels in the brain have been observed in humans with Wilson's disease and in animals exposed to high levels of copper (3).

Mice, mink, and hamsters injected with copper or fed a diet high in copper have shown developmental effects. These effects include fetal mortality and developmental abnormalities. No developmental effects have been reported in humans; however, there is a possibility that there may be an increased incidence of spontaneous abortion and miscarriage in women exposed to high levels of copper. Developmental effects have not been observed in healthy humans or in the offspring of mothers with Wilson's disease (3).

In humans, reproductive effects have not been reported when exposed to high levels of copper. Mink did not exhibit adverse effects when fed a diet high in copper. However, when a copper wire was inserted into the vas deferens or uterus of monkeys, rats, hamsters, and rabbits prior to conception or at gestational day 3, decreased fertility was observed (3).

The Drinking Water Criteria Document concluded toxicity data were inadequate for calculation of an RfD for copper.

Carcinogenic Effects

The EPA carcinogen classification for copper is Group D-inadequate evidence of carcinogenicity. An elevated incidence of cancer has not been observed in humans or animals exposed to copper via inhalation, oral, or dermal route of exposure (3).

Although there are no data on the mutagenicity of copper in humans, in vivo and in vitro studies of mammalian systems suggest that copper is a potential human mutagen (3).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

Available data are not adequate for establishing water quality criteria. However, the bioconcentration factor of copper in fish has been developed. The results of these studies indicate a low potential for bioconcentration with a range of factors for fish of 10-100. The bioconcentration factor for molluscs, such as oysters was considerably higher at a peak of 30,000. Evidence suggests that there is no biomagnification of copper in the food chain. The

biomagnification ratio in fish studied from lakes that were known to have received elevated loadings of copper, revealed that the ratio was <1 (3).

Terrestrial and Avian

In bioaccumulation studies of pollutant concentrations in the muscle and livers of 10 mammal species in Donana National Park in Spain, no evidence of bioaccumulation was obtained. No evidence of copper biomagnification in the food chain was observed (3).

REGULATORY LEVELS AND CRITERIA

OSHA PEL (transitory):
- Fumes (3): 0.1 mg/m^3
- Dusts and Mists (3): 1.0 mg/m^3

OSHA TWA (PEL)
- Fumes (3): 0.1 mg/m^3
- Dusts and Mists (3): 1.0 mg/m^3

EPA SMCL (3): 1.0 mg/L
- MCL (3): 1.3 mg/L
- MCLG (3): 1.3 mg/L

EPA Reportable Quantity (3): 5000 lbs

ACGIH TLV TWA:
- Fumes (3): 0.2 mg/m^3
- Dusts and Mists (3): 1.0 mg/m^3

NIOSH Occupational Exposure Limit:
- Fumes (3): 0.1 mg/m^3
- Dusts and Mists (3): 1.0 mg/m^3

Ambient Water Quality Criterion (3): 1.0 mg/L

1-Day Health Advisory (3): 1.3 mg/L

SUMMARY OF CRITERIA

EPA Classification (6):	Group D Inadequate evidence of carcinogenicity
Noncarcinogenic Effects	
Oral RfD (5):	0.00371 mg/kg·day
Inhalation RfC (6):	Not determined

REFERENCES

1. Sax, Irving N. and Richard J. Lewis, Sr. Hazardous Chemicals Desk Reference. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

2. Hawley, G.G., The Condensed Chemical Dictionary-Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

3. Toxicological Profile for Copper. (Draft) U.S. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. October 1989.

4. SPHEM. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C. October 1986.

5. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. FY 1992.

6. Integrated Risk Information System (IRIS). U.S. Environmental Protection Agency. On-Line June 1993.

Date of Last Revision: 3/29/93
Revisor: Joy Marshall

DDT SERIES PESTICIDES

INTRODUCTION

Technical DDT is a mixture containing 65-80% p,p'-DDT, 15-20% o,-p' DDT and up to 4% p,p'-DDD plus other trace materials. The metabolites of DDT include p,p'-DDE and o,p'-DDD. DDT isomers and their metabolites are usually found together and generally have the similar properties, therefore DDT has been referenced as the total combination of isomers and metabolites. However, specific differences between isomers are identified.

DDT, along with it's metabolites, are organochlorine pesticides which are very persistent in the environment. Historically, DDT was released to the environment during its formulation and extensive use as a pesticide in agricultural and vector control applications. It was banned from use in the United States in 1972, but is still used in other areas of the world. These compounds have been shown to be carcinogenic in mice and chronic exposure primarily cause liver and lung tumors and lymphomas. In addition, the nervous system appears to be one of the primary target organs for DDT toxicity in humans (6). In general, organochlorine pesticides are highly toxic to aquatic organisms, in addition to being responsible for a decreased population of many bird species (1).

Chemical Name:

p,p'-DDT: p,p'-1,1,1-Trichloro-2,2-bis(4-chlrophenyl)ethane
p,p'-DDD: p,p'-1,1-Dichloro-2,2-bis(4-chlorophenyl)-ethane
p,p'-DDE: p,p'-1,1-Dichloro-2,2-bis(4-chlorophenyl)-ethene

CAS Number(1):

p,p'-DDT: 50-29-3
p,p'-DDD: 72-54-8
p,p'-DDE: 72-55-9

Molecular Formula (1):

p,p'-DDT: $C_{14}H_9Cl_5$

p,p'-DDD: $C_{13}H_{10}Cl_4$

p,p'-DDE: $C_{14}H_8Cl_4$

Molecular Weight (1):

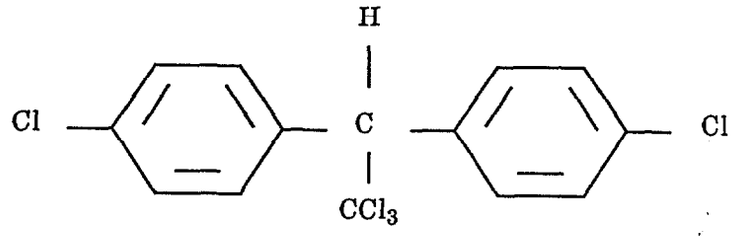
p,p'-DDT: 354.5 g/mole

p,p'-DDD: 320 g/mole

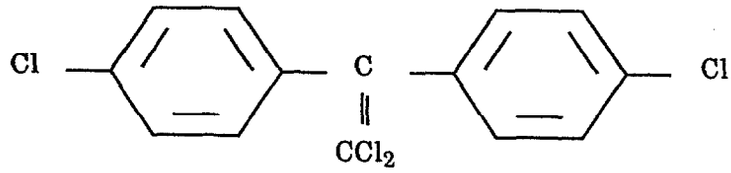
p,p'-DDE: 318 g/mole

Chemical Structure (6):

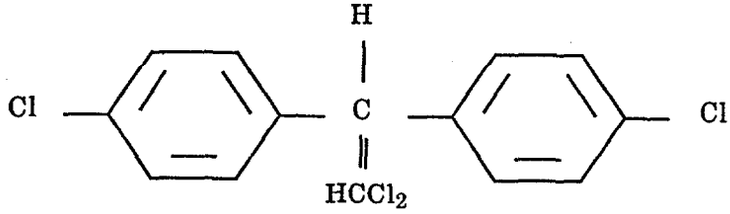
DDT:



DDE:



DDD:



FATE AND TRANSPORT

Chemical and Physical Properties

Log K_{ow} (6):

p,p'-DDT: 6.19

p,p'-DDD: 6.20

p,p'-DDE: 7.00

Log K_{oc} (6):

p,p'-DDT: 5.4

p,p'-DDD: 5.9

p,p'-DDE: 6.6

Boiling Point (1):

p,p-DDT: 260^{0}C

Melting Point:

DDT: 109^{0}C

DDD: 112^{0}C

DDE: 90^{0}C

Solubility in Water @ 25^{0}C (6):

p,p'-DDT: 3.4 µg/L

p,p'-DDD: 160 µg/L

p,p'-DDE: 120 µg/L

Solubility in Organics (1):

p,p'-DDT: Soluble in acetone, benzene, cyclohexane, morpholine, pyridine, and dioxane

Vapor Pressure (1):

p,p'-DDT: 1.9E^{-7} mm Hg at 25^{0}C

p,p'-DDD: 1.0E^{-6} mm Hg at 30^{0}C

p,p'-DDE: 6.5E^{-6} mm Hg at 20^{0}C

TRANSPORT AND PARTITIONING

DDT and its metabolites may be transported from one medium to another by the processes of solubilization, adsorption, bioaccumulation, or volatilization. Each of these processes will be discussed in the following paragraphs. Studies of DDT transformations in soils predict prolonged persistence. During these extended periods of time, these compounds undergo extensive adsorption to soil particles, as predicted by their organic carbon partition coefficients (K_{oc}) of 2.4×10^5, 4.4×10^6, and 7.7×10^5, for DDT, DDE and DDD, respectively. DDT, DDE and DDD are only slightly soluble in water (solubilities of 0.0034, 0.12, and 0.160 mg/L at 25°C, respectively). Therefore, loss of these compounds in runoff is primarily due to transport of particulates to which these compounds are bound. Since they are bound strongly to soil, they are not easily displaced from their site of application, nor do they tend to leach to groundwater, and appreciable amounts may remain in the soil for extended periods of time. When DDT is released to water, it quickly adsorbs to particles and is subject to sedimentation, or may bioconcentrate in microorganisms and can become part of the food chain.(6)

Volatilization of DDT and DDE is known to account for considerable losses of these compounds from solids and water. Their tendency to volatilize can be predicted by their Henry's Law Constants, 5.13×10^{-4} and 6.8×10^{-5} atm-m^3/mol, respectively, and their vapor pressures, 5.5×10^{-6} and 6.5×10^{-6} Torr, respectively. The tendency of DDD to volatilize is approximately three-fold less than that of DDT or DDE. Estimates of the rate of evaporative losses of DDT from water range from several hours to 50 hours. Laboratory studies of the air/water partition coefficient of DDE indicate that it will volatilize from seawater 10 to 20 times faster than from freshwater. The authors suggest that this process may be related to interaction at the bubble-water surface (6).

Small particles which carry DDT or its degradation products may also be distributed through the atmosphere. Once volatilized or airborne, transport of these compounds into the ambient atmosphere of North America is facilitated by a circulation pattern which brings moisture form the Gulf of Mexico into the Midwest and airflow patterns across the eastern seaboard. Residues are removed from the atmosphere by precipitation, diffusion into large bodies of water, and chemical transformation. Precipitation is believed to account for the greatest rate of removal (6).

DDT, DDE, and DDD are highly lipid soluble, as reflected by their log octanol-water partition coefficients (log K_{ow}) of 6.19, 7.00, and 6.20, respectively. This lipophilic property, combined

with an extremely long half-life, has resulted in bioaccumulation (levels in organisms exceed those levels occurring in the surrounding environment). When they are present in ambient water, DDT and its metabolites are concentrated in freshwater and marine plankton, insects, mollusks, other invertebrates, and fish. As these organisms become part of the food chain, a progressive accumulation of residues may result in high levels of residues in organisms at the top of the food chain. In some cases, man may be the ultimate consumer of these contaminated organisms. The bioconcentration factor (BCF) is defined as the ratio at equilibrium between the concentration of the chemical in the organism or tissue of the organism, and the concentration of the chemical in the surrounding media. There are numerous measurements and estimates of BCFs in fish. Oliver and Niimi estimated the steady-state BCF in rainbow trout as 12000.

TRANSFORMATION AND DEGRADATION

The dominant mechanism for removal of DDT from the atmosphere is believed to be via precipitation and secondarily, particulate fallout. Under simulated atmospheric conditions, both DDT and DDE decompose to form carbon dioxide and hydrochloric acid (6).

AIR

In air and sunlight, DDT is subject to direct photooxidation and reaction with photochemically produced hydroxyl radicals. The latter process has an estimated half-life of two days. Since DDT residues are ubiquitous in the atmosphere, it seems likely that photodegradation must occur at a slow rate. DDT which reaches the photochemically active ionosphere may be rapidly destroyed by solar irradiation as indicated under laboratory conditions (6).

WATER

DDT present in water may be partitioned, transported, or converted in several ways: adsorption to sediments, bioconcentration in aquatic organisms, volatilization, photodegradation, and biodegradation. DDT in water is photodegradable by wavelengths of light which are present in the troposphere. DDT in excess of water solubility limits is adsorbed onto sediments which act as the primary reservoir for excess quantities of DDT. There it is available for ingestion by organisms. Biodegradation is reported to be a minor source of transformation (6).

SOIL

Four mechanisms have been suggested to account for most losses of DDT residues from soils: (1) volatilization, (2) removal by harvest of organic matter, (3) water runoff and (4) chemical transformation. DDT is subject to volatilization, with an estimated half-life of 100 days. Photoxidation of DDT is known to occur on soil surfaces; however, DDT is not known to hydrolyze. Biodegradation may occur under both aerobic and anaerobic conditions in the presence of certain microorganisms. Under aerobic conditions, slow conversion to DDE normally occurs, whereas, under anaerobic conditions, conversion to DDD results and is much more rapid than the aerobic conversion to DDE. Under aerobic conditions, dehydrochlorination is the dominant reaction, while under anaerobic conditions, reductive dechlorination occurs. Both metabolites are very resistant to further transformation. Due to the prolonged half-life of DDE, average levels of DDT are expected to decline slowly while the ratio of DDE to DDT is expected to increase. Estimates of the half-life for DDT biodegraded in soil range from 2 to >15 years (6).

PHARMACOKINETICS

Absorption of DDT by the lung is considered to be a minor route of entry. Due to the large particle size, it does not enter into the smaller spaces of the lung, but is deposited in the upper respiratory tract, and due to the action of the mucociliary apparatus it is eventually swallowed. However, some particles may be small enough to enter the tracheal system. No studies have been located that quantify the rate or extent of absorption of DDT, DDD or DDE (6).

Absorption following ingestion of DDT, DDE and DDD is evident in humans from measurements of serum and adipose tissue concentrations of these chemicals after occupational exposure. Gastrointestinal absorption is evidenced by the presence of DDT and metabolites measured in bile and the induction of tumors in animals following oral administration of the compounds. Approximately 70-90% of the dose has been absorbed following oral exposure to DDT in vegetable oils (6).

Dermal absorption of DDT in humans is considered to be limited, but can be inferred by observation of toxicity following dermal application of DDT. Acute toxicity studies have shown that toxicity is less when DDT is applied dermally than when given by gavage or injection (6).

The distribution and storage of DDT in humans and animals has been extensively studied. DDT and its metabolites are lipid soluble compounds, and once absorbed readily distribute to all body tissues in proportion to respective tissue lipid content (6).

HUMAN HEALTH EFFECTS

Carcinogenic Effects

DDT has been classified as a B2 carcinogen, a probable human carcinogen, however, the existing epidemiological human health research data for carcinogenicity are inadequate . The basis for the B2 classification is the observation of tumors (generally liver tumors) in various mouse strains and in three studies of rats. In addition, DDT is structurally similar to other probable carcinogens such as DDD and DDE. Lung tumors have also been observed in chronic studies of mice, while increased tumor incidence in hamsters have also been observed (2).

DDT has produced both negative and positive responses in tests for genotoxicity (2).

An oral slope factor (CSF) has been set at $3.4E^{-1}$ mg/kg-d by the United States Environmental Protection Agency (USEPA). An inhalation unit risk number has also been set at $9.7E^{-5}$ $\mu g/m^3$ (2).

Noncarcinogenic Effects

Increased hepatocellular hypertrophy, cytoplasmic oxyphilia and peripheral basophilic cytoplasmic granules were observed in chronic rat studies where rats were fed commercial DDT. Liver lesions were also seen in one 2 year rat study. In addition, DDT-induced liver effects were observed in mice, hamsters and dogs. One three generation rat reproduction study showed offspring mortality at all administered doses. Three other rat studies showed no reproductive effects at much higher dose levels (2).

An oral reference dose (RfD) of $5E^{-4}$ mg/kg-d has been set by the USEPA. The Lowest Observed Adverse Effects Level for the study in which the RfD was derived was 0.25 mg/kg-d. The study from which the RfD was derived was chosen for the following reasons; male rats were used in the study (male rats are more sensitive than female rats to DDT), the study was

of sufficient length to observe toxic effects and several doses were administered in the diet over the range of the dose-response curve (2).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

DDT has been extensively studied in freshwater invertebrates and fish and is quite toxic to most species. Saltwater species are even more sensitive than freshwater species (1).

Ambient Water Quality Criteria (AWQC) have been set for DDT, however, criteria have not been set for DDD and DDE, the Lowest Observed Adverse Effects Level (LOAEL) have been reported as a guideline for aquatic adverse effects for these two compounds (3).

DDT: (AWQC)
Freshwater Acute: 1.1 µg/L
Freshwater Chronic: 0.001 µg/L
Marine Acute: 0.13 µg/L
Marine Chronic: 0.001 µg/L

DDD: (LOAEL)
Freshwater Acute: 0.6 µg/L
Marine Acute: 3.6 µg/L

DDE: (LOAEL)
Freshwater Acute: 1,050 µg/L
Marine Acute: 14 µg/L

Terrestrial and Avian

DDT, DDD and DDE and other persistent organochlorine pesticides are primarily responsible for the great decrease in the reproductive capabilities and consequently in the populations of fish-eating birds, such as the bald eagle, brown pelican, and osprey. DDT has also been shown to decrease the populations of numerous other species of waterbirds, raptors, and passerines significantly (1).

OCCUPATIONAL REGULATORY LEVELS AND CRITERIA

Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL), Time-weighted average: 1 mg/m^3, skin (4).

American Conference of Governmental Industrial Hygienist (ACGIH) Time-Weighted Average Threshold Limit Value (TLV): 1 mg/m^3 (5).

REFERENCES

(1) Clement Associates Inc.. Chemical, Physical, and Biological properties of Compounds Present At Hazardous Waste Sites, Final Report. September 27, 1985.

(2) USEPA. Integrated Risk Information System (IRIS). March 1993.

(3) USEPA. Ambient Water Quality Criteria. Office of Water Regulations and Standards, Criteria and Standards Division. October 1980.

(4) ACGIH. Documentation of the Threshold Limit Values. 1992-1993.

(5) OSHA. Title 29 Code of Federal Regulations, Part 1910.1000, Table Z-1-A. 1992.

(6) Agency for Toxic Substances and Disease Registry. Toxicological Profile for p,p'-DDT, p,p'-DDE and p,p'-DDD. April 1989.

Date of Last Revision: 3/19/93
Revisor: Rich Hoff

LEAD

INTRODUCTION

Chemical Name: Lead
CAS Number: 7439-92-1
Molecular Formula: Pb
Molecular Weight: 207 g/mole
Chemical Structure: Pb

Elemental lead is a heavy, ductile, bluish-gray solid at ambient conditions. It is used widely in industry because of its softness, resistance to corrosion and radiation, and high density. Lead is also used as a paint pigment, in solder, and in storage batteries.

FATE AND TRANSPORT

Bioconcentration Factor (BCF): 49 (1)
Degradation Products: None
Solubility: Lead is insoluble in water and organic solvents. It does dissolve in dilute nitric acid (2), and hot, concentrated sulfuric acid (3).
Specific Gravity (2): 11.35 @ 20°C

Lead and lead compounds can be present in air, water, and soil and are extremely persistent in water and soil (4). Metallic lead and common lead minerals are insoluble in water while manufactured alkyl lead compounds are water soluble. A major transport process for inorganic and organic lead compounds is atmospheric dispersion as particulate matter. Lead is removed from air by either wet or dry deposition. Photolysis of atmospheric organic lead compounds occurs rapidly (3). The average residence time of atmospheric lead is 7 to 30 days (4).

Natural lead compounds are not mobile in normal surface and groundwater because lead leached from ore is adsorbed by ferric hydroxide. It also readily combines with hydroxide,

carbonate, and sulfate ions to form insoluble compounds. These compounds precipitate and settle in the bed sediment. Lead is not volatile, therefore, volatilization is not an important transport process from aquatic environments (3).

Sorption is a dominant effect on the distribution of lead in soil. Lead readily adsorbs to inorganic solids, organic material and hydrous iron and manganese oxides. Because of its affinity for other materials and its solubility characteristics, the mobility of lead in soil is low. (3). Most lead is retained in soil and not transported via leaching or runoff to surface water (4).

Lead is not readily taken up by plants. Consequently, its availability to terrestrial life forms is limited (3). Lead does not appear to significantly bioaccumulate in most fish (4). Microcosm studies indicate that lead is not biomagnified through the food chain (3).

PHARMACOKINETICS

Lead primarily enters the body by inhalation and ingestion. For all practical purposes, it will not enter the body by dermal contact. Approximately 30-50 percent of all inhaled lead particulate is deposited in the respiratory tract. Almost all of the lead present will be absorbed by the lungs. The primary site of absorption by ingestion in children is the gastrointestinal tract. Fifty percent of all dietary lead ingested by children is absorbed, whereas only 8-15 percent is absorbed by adults. Studies have also demonstrated that transplacental transfer of lead is possible.

Lead is not homogeneously distributed upon entering the body. It concentrates in the following three organs: bone, blood, and soft tissue. The lead in each of these compartments has a different rate of intercompartmental movement and residence time (4).

Inorganic lead is not metabolized in the body; rather it is absorbed, distributed and excreted. However, organic alkyl lead is metabolized in the liver via an oxidative dealkylation reaction which is catalyzed by cytochrome P-450 in animals (4).

Lead that is not absorbed by the respiratory or gastrointestinal tract is excreted in the feces. Blood lead not retained by the body is eliminated by the kidney or bile (4).

HUMAN HEALTH EFFECTS

Systemic Effects

Numerous studies have been conducted on the toxic effects of lead. The data present dose effect relationships and are expressed in terms of internal exposure measured in blood lead levels (4).

Lead affects various systems of the body. The endpoints elicited at low level exposure are neurobehavioral impairment, growth retardation in children, and hypertension in middle-aged men. High exposure levels produce encephalopathy, gastrointestinal effects, anemia, nephropathy, and electrocardiographic abnormalities (4).

Lead affects the hematopoietic system by interfering with heme biosynthesis and ferrochelatase. This interference results in a reduction of the hemoglobin concentration in blood and an increase in erythrocyte (red blood cell) destruction. The combination of these two effects produce hypochromic, normocytic anemia with associated reticulocytosis. The impairment of heme synthesis has a far ranging impact that is not limited to the hematopoietic system.

Lead exposure also affects the central nervous system. Overt neurological signs have been documented in adults with blood lead levels ranging as low as 40 to 60 µg/dl. Encephalopathy can occur at blood lead levels of 100 to 200 µg/dl and 80 to 100 µg/dl for adults and children, respectively. As indicated by these levels, children are much more sensitive to neurological effects of lead. Death or irreversible health effects may occur as a result of central nervous system impairment (4).

The cardiovascular system is also impacted by lead exposure. Common effects from high level exposure include cardiac lesions and electrocardiographic abnormalities. Hypertension has been clearly related to lead exposure. Studies suggest that high blood pressure resulting from lead exposure may be mediated through effects on the kidney (4).

A direct relationship has been drawn between blood lead level and children's height, weight, and chest circumference. The strongest relationship was drawn with height. As the blood lead level increases the child's growth is retarded (4).

Exposure to lead has significantly effected the human reproductive system. Because lead accumulates in the bones and is sporadically released into the blood, exposure prior to pregnancy may affect the fetus. Blood lead reaches the fetus by crossing through the placental barrier. It was observed in animals that exposure to lead by non-natural routes (e.g., intravenous or intraperitonael injection) resulted in malformations of the fetus (4).

In the body, lead can interact with other chemicals. Calcium and phosphorus reduce the amount of lead taken up by the body while zinc helps to reduce the toxic effects of lead. Cadmium increases the toxic effects of lead; and lead increases the toxic effects of mercury. Due to the effect of lead on the hemapoietic system, iron deficiency increases as blood lead increases (4).

Derivation of Oral Reference Dose for Lead

U.S. EPA has not promulgated an oral reference dose (RfD) or air inhalation reference concentration (RfC) for lead.

Carcinogenic Effects

The EPA has stated that "little can be concluded from available epidemiological studies" concerning the carcinogenic potential of lead (4). However, the carcinogenicity of lead salts (primarily phosphates and acetates) administered via injection or the oral route has been demonstrated in rats and mice in several studies. In most of the investigations, the carcinogenic response has been demonstrated only at the highest dose. Although the EPA has stated that animal data are sufficient to conclude carcinogenicity in animals, the Agency has further stated that available toxicity data on metallic lead and lead compounds are inadequate for quantitative risk assessment (6).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

Freshwater species are more sensitive to lead contamination in soft water than hard water for both acute and chronic exposure. The ambient water quality criteria for aquatic life are as follows (5):

Four-day average concentration that should not be exceeded more than one time per year.

Freshwater	Salt Water
$e^{(1.273 (\ln (\text{hardness}))-4.705)}$ µg/L	5.6 µg/L
3.2 µg/L	

One-hour average concentration that should not be exceeded more than one time per year.

Freshwater	Salt Water
$e^{(1.273 (\ln (\text{hardness}))-4.460)}$ µg/L	140 µg/L
82 µg/L	

The BCF for saltwater species ranges from 17.5 to 2570 µg/L (3).

Terrestrial

Lead occurs in the tissues of many wildlife species. Lead poisoning has also been reported for a variety of domestic animals including cattle, horses, dogs, and cats. Cattle appear to experience lead poisoning more often because of their indiscriminate eating habits (3).

REGULATORY LEVELS AND CRITERIA

Ambient Air Quality Standard (4):	1.5 µg/m^3
OSHA Action Level (4);	30 µg/m^3
PEL (4):	50 µg/m^3
MCL:	Treatment Technology
Reportable Quantity (metallic) (4):	1 lb
NIOSH TWA (4):	0.10 mg/m^3
ACGIH TWA-TLV (4):	0.15 mg/m^3 (inorganic lead, dust, and fumes)
	0.15 mg/m^3 (lead arsenic)
	0.05 mg/m^3 (lead chromate)
Ambient Water Quality Criterion:	50 µg/L

SUMMARY OF CRITERIA

EPA Carcinogenic Classification (4):	Group B2-possible human carcinogen
RfD (oral) (6):	Not Available
RfC (inhalation) (6):	Not Available
Cancer Slope Factor (oral, inhalation) (6):	Not Available

REFERENCES

1. SPHEM. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C. October 1986.

2. Hawley, G.G. The Condensed Chemical Dictionary - Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1981.

3. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

4. Toxicological Profile for Lead. U.S. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. June 1990.

5. Ambient Water Quality Criteria. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. May 1986.

6. IRIS. Integrated Risk Information System. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 1993.

7. U. S. Environmental Protection Agency, Federal Register, Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper, Vol. 56, No. 110, June 7, 1991.

8. Marcus, W.L., 1986. Lead Health Effects in Drinking Water", Toxicology and Industrial Health, Vol. 2, No. 4, pp. 363-407.

Date of Last Revision: 6/7/93

Revisor: Rich Hoff

alpha-, beta-, delta- and gamma-BHC (HEXACHLOROCYCLOHEXANE)

INTRODUCTION

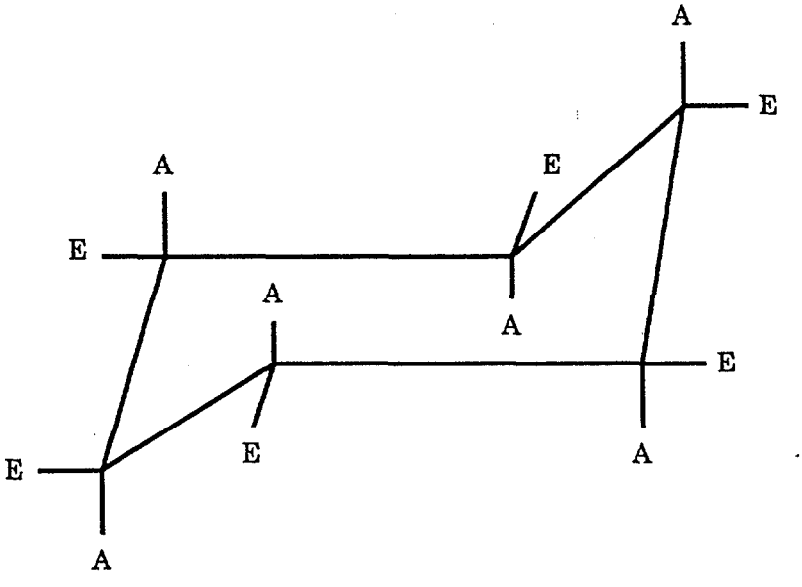
Chemical Name: alpha, beta, delta, gamma-BHC (hexachlorocyclohexane)

CAS Numbers: 319-84-6, 319-85-7, 319-86-8, 58-89-9

Molecular Formula(1): $C_6H_6Cl_6$

Molecular Weight(1): 291.0

Chemical Structure(1):



Orientation of Cl- on ring	BHC Isomer
AAEEEE	α (alpha)
EEEEEE	β (beta)
AEEEEE	δ (delta)
AAAEEE	γ (gamma)

Alpha, beta, delta, and gamma-BHC are aliphatic chlorinated hydrocarbon pesticides representing the four major isomers of technical grade hexachlorocyclohexane (HCH). The gamma isomer (lindane) is generally the most toxicologically active[2]. The BHCs are fairly persistent in environmental media. Primary fate and transport of BHCs appears to be adsorption to soils and sediments and subsequent biodegradation.

FATE AND TRANSPORT

Log K_{oc}: 3.58, 3.58, 3.82, 3.58
Log K_{ow}: 3.89, 3.89, 4.15, 3.89
Henry's Law Constant (@ 20°C): 6×10^{-6}, 4.5×10^{-7}, 1.7×10^{-5}, 7.8×10^{-6} (@ 25°C)
Vapor Pressure (@ 20°C)[3]: 2.5×10^{-5}, 2.8×10^{-7}, 1.7×10^{-5}, 1.6×10^{-4} (@ 25°C)
Water Solubility (mg/L @ 25°C)[3]: 1.63, 0.24, 31.4, 7.8
BCF[4]: 100-500

BHCs, by virtue of their K_{ow} and K_{oc} values tend to adsorb to soils and sediments with subsequent biodegradation. Biodegradation of BHCs yields chemicals such as pentachlorocyclohexane, tetrachlorobenzene, trichlorophenol, and, therefore, may not result in substantial detoxification. Gamma-BHC (lindane) has been shown to be rather persistent when applied to soil with as much as 10 percent remaining after 10 years[4].

PHARMACOKINETICS

Dietary alpha-BHC has been shown to cause increased incidences of liver tumors in five mouse strains and in Wistar rats.

Groups of 20 to 40 male dd mice were treated with 100, 250, or 500 ppm alpha-HCH in the diet for 24 weeks. They observed liver nodules and hepatocelluar carcinomas in the two upper dose groups. In a subsequent study, Ito maintained male DDY mice on a diet containing 500 ppm alpha-HCH for 16, 24, or 36 weeks, respectively. Incidence of liver tumors increased with continuous alpha-BHC administration. Incidence decreased, however, with recovery time. At 24 weeks most lesions observed were nodules, but by 60 or 72 weeks the tumors were primarily hepatocelluar carcinomas[5].

Schulte-Hermann and Parzefall noted an increased incidence of hepatic nodules and hepatocellular carcinomas in female Wistar rats treated with approximately 20 mg/kg/day

alpha-BHC for their lifetime. Male Wistar rats were fed alpha-BHC in the diet at 500, 1000, or 1500 ppm for 24, 48, or 72 weeks. Liver nodules and carcinomas were observed in rats fed the two highest doses for 72 weeks. Both males and females of the dd strain responded in a dose-dependent fashion with liver nodules and hepatomas when fed 100, 300, or 600 ppm dietary alpha-BHC for 32 weeks, followed by 5 to 6 weeks basal diet. In a feeding study using male ICR-JCL mice, alpha-BHC produced hepatomas in 100 percent of the animals. Liver tumors have been observed as early as 24 to 26 weeks[5].

Dietary beta-BHC produced positive or marginally positive tumorigenic responses, characterized as benign hepatomas or hepatocellular carcinomas, have been observed in two strains of mice. The studies are limited in that small numbers of animals were used, no dose-response data are available, not all of the animals were examined histologically, or the duration of exposure was less than lifetime.

Thorpe and Walker fed 30 each male and female CF1 mice dietary beta-BHC at 200 ppm for 110 weeks. This resulted in 12 percent mortality of males and 25 percent of females during the first 3 months. A significantly increased incidence of liver tumors was observed in treated males and females.

No statistically significant evidence of increased tumor incidence as a consequence of beta-BHC feeding was seen in several small (5 to 20/group) studies with male and female dd mice fed 0 to 600 ppm for 24 to 32 weeks or in male Wistar rats fed 0 to 1000 ppm for >72 weeks.

Goto et al. maintained male ICR-JCL mice on a diet containing 600 ppm beta-BHC for 26 weeks. Relative liver weight was increased in the treated animals, and there was histologic evidence of benign neoplasms at an unspecified incidence.

Twenty male and female Wistar rats were administered 0, 0.2, 0.8, 4, 20, or 100 ppm gamma-BHC (lindane) (99.85 percent) in the diet. After 12 weeks, 15 animals were sacrificed. The remaining rats were fed the control diet for an additional 6 weeks before sacrifice. No treatment-related effects were noted on mortality, hematology, clinical chemistry, or urinalysis. Rats receiving 20 and 100 ppm lindane were observed to have greater-than-control incidence of the following: liver hypertrophy, kidney tubular degeneration, hyaline droplets, tubular distension, interstitial nephritis, and basophilic tubules. Since these effects were mild or rare in animals receiving 4 ppm, this represents a NOAEL. The reviewers of the study

calculated the dose to be 0.29 mg/kg/day for males and 0.33 mg/kg/day for females, based on measured food intake[5].

In a 2-year feeding study, 10 Wistar rats/sex/group were exposed to 5, 10, 50, 100, 400, 800, or 1,600 ppm lindane. Slight liver and kidney damage and increased liver weights were noted at the 100 ppm level. If a food intake equal to 5 percent body weight is assumed, a NOAEL of 2.5 mg/kg bw/day (50 ppm) can be determined from this assay. In a two-year bioassay, four beagle dogs/sex/group were administered 0, 25, 50, or 100 ppm gamma-BHC in the diet. Treatment-related effects noted in the animals of the 100 ppm group were increased serum alkaline phosphatase and enlarged dark friable livers. A NOAEL was determined to be 50 ppm for gamma-BHC (1.6 mg/kg bw/day)[5].

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

BHCs can cause convulsions in humans exposed occupationally even by the topical (dermal) route. Nervousness, irritability, insomnia, vertigo, amblyopia, stupor and coma have been observed following excessive cutaneous application. BHCs can sensitize the heart to arrhythmias. Technical grade BHC is an irritant to the skin, eyes, and mucosea. Fatal cases of aplastic anemia have resulted from prolonged exposure to vaporized gamma-BHC[6].

The alpha and gamma isomers are CNS stimulants, but the beta and delta isomers are depressants.

Carcinogenic Effects

USEPA has classified alpha-BHC as a B2; probable human carcinogen on the strength of laboratory dietary mouse studies. USEPA has also classified beta-BHC as a C; possible human carcinogen as a result of dietary mouse studies[5].

Ecological Effects

Gamma-BHC (lindane) is responsible for the effectiveness of technical hexachlorocyclohexane as an insecticide and is generally more toxic than the other isomers or technical BHC. In fact, the presence of the other BHC isomers decreases the toxicity of lindane to aquatic organisms,

either by an antagonistic effect or by decreasing the chemical's solubility. Therefore, the toxicity of lindane and other BHCs are considered separately.

Lindane is acutely toxic to freshwater fish with LC_{50} values ranging from 2 µg/L to 141 µg/L; and to saltwater fish at levels of 7.3 to 104 µg/L. Lindane was acutely toxic to the pink shrimp at 0.17 µg/L. Acute-chronic ratios for lindane ranged from 7.5 to 63, and, therefore, the Final Chronic Value for the protection of freshwater species was determined to be 0.08 µg/L. Aquatic organisms appear to bioconcentrate between 100 and 500 times the steady-state concentration of lindane in the water.

Technical BHC was much less toxic than lindane, with acute toxicity ranging from 100 µg/L to 15,000 µg;/L for freshwater fish. Data on saltwater species also indicated that the technical compound was less acutely toxic. No information was available on the chronic toxicity of BHC. A bioconcentration factor was not reported but is probably similar to that for lindane[7].

No studies on the toxicity of the BHC isomers to terrestrial or domestic animals was found in the literature reviewed. However, voles at Love Canal that had decreased lifespans and reproductive ability had high levels of lindane in their livers[8].

REGULATORY LEVELS AND CRITERIA

OSHA TWA - TLV[9]:	500 µg/m^3 (lindane)
Maximum Contaminant Level (MCL)[10]:	0.0002 mg/L (lindane)
MCLG[10]:	0.0002 mg/L (lindane)
Health Advisories[11]:	
<u>Lindane</u>	
10 day child	1.2 mg/L
Longer term child:	0.033 mg/L
Longer term adult:	0.12 mg/L
Lifetime:	0.0002 mg/L

Ambient Water Quality Criteria[12]	
Water and Fish Consumption:	0.0092 µg/L (alpha), 0.0163 µg/L (beta), 0.0186 µg/L gamma
Fish Consumption Only:	0.031 µg/L (alpha), 0.0547 µg/L (beta), 0.0625 µg/L gamma
Acute Freshwater LEC:	100 µg/L (alpha), 100 µg/L (beta), 200 µg/L gamma
Acute Marine LEC:	0.031 µg/L (alpha), 0.0547 µg/L (beta), 0.0625 µg/L gamma
Chronic Freshwater LEC:	0.08 µg/L (gamma)
Chronic Marine LEC:	None

SUMMARY OF TOXICOLOGICAL INDICES

USEPA Carcinogenic Classification:	B2 (alpha), C (beta), D (delta), D (gamma)
Oral RfD[5]:	0.0003 mg/kg/day (gamma)
Inhalation RfC[5]:	Pending
Cancer Slope Factor[5]:	6.3 kg·d/mg (alpha) 1.8 kg·d/mg (beta)

REFERENCES

1. U. S. Environmental Protection Agency. 1982. Aquatic Fate Process Data for Organic Priority Pollutants. Final Report. 440/4-81-014.

2. International Agency for Research on Cancer (IARC). 1979. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. Vol. 30: Hexachlorohexane (Technical HCH and Lindane). World Health Organization, Lyon, France. pp. 195-329.

3. Verschueren, K. 1977. Handbook of Environmental Data on Organic Chemicals. Van Nostrand Reinhold Co., New York. p. 659.

4. Clement Associates. 1985. Chemical, Physical, and Biological Properties of Compounds Present at Hazardous Waste Sites. Final Report. Prepared for U. S. Environmental Protection Agency.

5. U. S. Environmental Protection Agency. 1993. Integrated Risk Information System (IRIS). On-Line. June 1993.

6. Goodman, L. S., A. G. Gilman, A. Gilman, A. 1980. Goodman and Gilman's The Pharmacological Basis of Therapeutics. Sixth Edition. Macmillan Publishing Co., Inc. New York.

7. U. S. Environmental Protection Agency. 1979. Water-Related Environmental Fate of 129 Priority Pollutants. Washington, D. C. December 1979./ EPA 440/4-79-029.

8. Rowley, M. H., J. J. Christian, D. K. Basa, M. A. Pawlikowski, and B. Paigen. 1983. "Use of Small Mammals (Voles) to Assess a Hazardous Waste Site at Love Canal, Niagara Falls, New York." Arch. Environ. Contam. Toxicol. 12:383-397.

9. National Institute for Occupational Safety and Health (NIOSH). 1983. Registry of Toxic Effects of Chemical Substances. Data Base. Washington, D. C. October 1983.

10. U. S. Environmental Protection Agency. 1993. Drinking Water Regulations and Health Advisories. Office of Drinking Water. May 1993.

11. U. S. Environmental Protection Agency. 1984. Health Effects Assessment for Lindane. Environmental Criteria and Assessment Office, Cincinnati, Ohio. September 1984. ECAO-CIN-HO56. Final Draft.

12. U. S. Environmental Protection Agency. 1980. Ambient Water Quality Criteria for Hexachlorocyclohexane. Office of Water Regulations and Standards, Criteria and Standards Division, Washington, D. C. October 1980. EPA 440/5-80-054.

Date of Last Revision: 3/19/93

Revisor: Rich Hoff

POLYCHLORINATED BIPHENYLS (PCBS)

INTRODUCTION

Chemical Name: Polychlorinated Biphenyls (PCBs)

Synonyms and Trade Names: Aroclor, Kanechlor, Clophen

CAS Numbers:	Aroclor 1242:	53469-21-9
	Aroclor 1248:	12672-29-6
	Aroclor 1254:	11097-69-1
	Aroclor 1260:	001336-36-3

Molecular Formula: C6H5ClxC6H5Clx

Molecular Weights:	Aroclor 1242:	266.5 g/mole
	Aroclor 1248:	299.5 g/mole
	Aroclor 1254:	328.4 g/mole
	Aroclor 1260:	377.8 g/mole

The term polychlorinated biphenyls (PCBs) commonly refers to a variety of mixtures of individual biphenyl isomers, each consisting of two joined benzene rings and up to ten chlorine atoms. Mixtures of these isomers are known by their commercial designation of Aroclor. This trade name is followed by a four-digit number; the first two numbers indicate the type of isomer mixture and the last two numbers indicate the approximate weight percent of chlorine in the mixture (3).

PCBs are man-made chemicals that were used widely in transformers, electrical equipment and as lubricants (2). Because of their persistence and toxicity in the environment, their manufacture was discontinued in the United States in 1977 (1). However, PCB equipment manufactured before 1977 is currently still being used in the U.S. and this use is being regulated by the Environmental Protection Agency.

PCBs are very stable chemically and tend to be persistent in the environment. Persistence and bioaccumulation in living organisms also occur due to the high lipophilicity of these compounds (2).

CHEMICAL AND PHYSICAL PROPERTIES

Aroclor	1242	1248	1254	1260
Log K_{oc}	3.8	5.75	5.51	6.3
Log K_{ow}(2):	5.6	6.11	6.03	7.15
Henry's Law Constant(2): (atm-m^3/mol at 25° C)	5.7×10^{-4}	3.5×10^{-3}	8.4×10^{-3}	7.1×10^{-3}
Water Solubility (mg/L):	0.24	0.054	0.012	0.0027
Vapor Pressure(2): (mm Hg at 25° C)	4.06×10^{-4}	4.94×10^{-4}	7.71×10^{-5}	4.0×10^{-5}
Density (2):	1.35	1.41	1.50	1.57

FATE AND TRANSPORT

PCBs can be found in the atmosphere, water, and soil. Adsorption to sediments is the major fate process for PCBs in water. Because of lower water solubilities and higher octanol-water partition coefficients, higher chlorinated isomers will adsorb more strongly than the lower chlorinated isomers. This also indicates that significant leaching should not occur in soil under most conditions (2).

For PCBs that exist in the dissolved state in water, volatilization becomes the primary fate process. Therefore, the volatilization process is the major removal mechanism of PCBs from water sources. However, the rate of volatilization is dependent upon PCB adsorption to sediment (2).

In the atmosphere, PCBs exist in the vapor phase and can be removed by wet and dry deposition. A typical range of PCB concentrations in the atmosphere is between 1 and 250 µg/L (2).

Degradation of PCBs in the environment is dependent upon the degree of chlorination. Generally, the more chlorinated the PCB molecule, the more persistent it will be in the environment. Factors which determine biodegradability include the amount of chlorination, concentration, type of microbial population, available nutrients, and temperature (2). The

dominant degradation process in the atmosphere is dependent upon the vapor phase reaction of PCBs with hydroxyl radicals (2).

Photolysis is thought to be the only transformation process in the aquatic environment. However, the process is extremely slow. It appears the hydrolysis and oxidation do not degrade PCBs (2).

In the atmosphere, typical airborne concentrations of PCBs are as follows (2):

Location	Concentration Range (mg/m^3)
Urban	0.5 to 30
Rural	0.1 to 2.0
Great Lakes	0.4 to 3.0
Marine	0.05 to 2.0
Remote	0.02 to 0.5

The concentrations of PCBs in the open waters of oceans and lakes are shown below (2):

Location	Concentration Range (µg/L)
North Pacific	0.04 to 0.59
Antarctic	0.035 to 0.069
North Atlantic	0.02 to 0.20
Lake Superior	0.63 to 3.30
Lake Michigan	3.0 to 9.0
Lake Huron	0.49 to 17.15

PCBs are found in the soils from different areas of the world in the following concentrations (2):

Location	Concentration Range (ppb)
Great Britain	2.3 to 444
South Wales/Scotland	4.5 to 47.7
Japan	<10 to 100
United States	
Everglades National Forest, Florida	<1 to 33
U.S. Urban areas	0.02 to 11.94
Rocky Mountain National Park	0.098 to 0.54
Great Lakes	2.5 to 251.7

PHARMACOKINETICS

PCBs are absorbed primarily through inhalation and dermal contact in occupational environments. However, the general public absorbs PCBs primarily through oral exposure, such as the ingestion of PCB contaminated fish (2).

Animal studies have shown that PCBs are readily absorbed, but studies to quantify the rate of absorption are needed. Studies indicate that PCBs are absorbed by the gastrointestinal tract, and have been found in the serum and breast milk of woman orally exposed to PCBs (2).

PCBs accumulate in human plasma and adipose tissue with the extent of accumulation dependent on the positions of chlorines on the PCB congeners. Congeners with chlorines in both 4 positions as opposed to the 3 ,4 positions were found in greater concentrations (2). Also, PCBs have been shown to accumulate in human breast milk. The extent of accumulation is approximately 4 to 10 times less than the concentration in maternal blood (2).

Animal studies have indicated maximum concentrations in the liver, brain, and adipose tissue. Studies show that distribution occurs in a biphasic manner. First, PCBs accumulate in the liver and muscle from the blood stream. Following this accumulation, PCBs are either

stored in the adipose tissue or metabolized by the liver. It has been suggested that PCBs concentrate in the adipose tissue regardless of the route of exposure (2).

The metabolism of PCBs depends on chlorine content and on the site of chlorination. The major metabolic products are phenolic in nature. Other identified end products are sulfur-containing compounds, trans-dehydrodiols, polyhydroxylated PCBs and methyl ether derivatives (2).

Data regarding the excretion of PCBs following inhalation or dermal exposure are not available. When oral exposure occurs, excretion is dependent upon the metabolism of PCBs to more polar compounds (2).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

The evaluation of the toxicity of PCBs is complicated by a number of factors including differences in isomer/congener/mixture composition, differences in species susceptibility, quantitatively inconsistent data, and varying degrees of contamination from other chemicals such as chlorinated dibenzofurans. Also, it should be noted that because of changes in congener and impurity composition resulting from environmental and/or biological transformations, PCBs currently in the environment may differ from the original PCB mixture (2).

Inhalation Exposure

There are no human data available regarding the lethality/decreased longevity of humans due to acute or chronic inhalation exposure. However, the primary target organs associated with PCB inhalation are the liver and cutaneous tissue. Occupational exposure has been associated with elevated serum levels in the liver and enzyme and dermatologic effects such as chloracne and skin rashes (2).

Human developmental studies have proved inconclusive and lack monitoring data. However, there were suggestions that mothers occupationally exposed to PCBs exhibited a slight decrease in birth weight and gestational age of offspring. No animal studies were available concerning developmental toxicity (2).

In animals, the liver and skin are unequivocal targets of PCB toxicity, especially in terms of chronic toxicity. The range of toxicity for dermal and hepatic effects is from 0.007 to 11.0 mg/m^3 (2).

Oral Exposure

There are no studies which address oral PCB exposure in humans. However, animal studies have established a single dose LD50s for rats and mice. The levels are 1,010 mg/kg for Aroclor 1254 and 750 mg/kg for Aroclor 1221, respectively (2).

Systemic effects in animals include perturbations of the liver and cutaneous tissues. Rats fed 0, 4, 8, and 16 ppm of Aroclor 1254 for 4 days resulted in an increase in liver weight at concentrations greater than 8 ppm and an increase of serum HDL cholesterol levels at 16 ppm. A lowest observed adverse effect level (LOAEL) of 5 ppm was identified in rats based on hepatic effects. At this level, hepatic microsomal enzyme activities increased, production of liver lipid content increased, and frank degenerative liver alterations were observed (2).

Developmental effects in humans from oral exposure to PCB contaminated fish include effects on birth weight, head circumference, gestational age and/or neonatal behavior. For animals, a LOAEL of 50 ppm in female rats has been identified based on fetotoxicity. At this level, effects such as reduced litter size, ultrastructural lesions in the thyroid follicular cells of neonates and weanlings and reduced serum levels of thyroid hormone were observed (2).

The only study relating PCBs to reproduction demonstrated that doses of >2 ppm Aroclor 1254 administered to mink for 4 months prior to mating and during gestation were lethal to fetuses and caused reproductive failure (2).

Dermal Exposure

Dermal exposure is a major route of PCB absorption. However, the current data does not allow for the quantification of dermal absorption to the total body burden of PCBs (2).

A study involving capacitor workers does not show clear evidence of liver disease. However, a correlation can be made between the PCB exposure and liver enzyme induction in the workers.

It is not clear to what extent the dermal absorption affected the hepatic changes since inhalation exposure also occurred (2).

A study involving dermal exposure of Aroclor 1260 to a female New Zealand rabbits for 5 days/week at a dose of 118 mg/day for 38 days produced degenerative lesions of the liver and kidneys, increased fetal porphyrin elimination and hyperplasia and hyperkeratosis of the follicular and epidermal epithelium (2). Other studies indicate that the median lethal dose for single dermal exposure for rabbits was >1269 mg/kg for Aroclor 1242 and 1248 to <3,169 for Aroclor 1221 (2).

No studies have been located which address immunological, neurological, developmental or reproductive effects of PCBs on humans or animals (2).

Carcinogenic Effects

The EPA has classified PCBs as a Group B2 carcinogen - a probable human carcinogen. This classification is based on the evidence of hepatocellular carcinomas in three strains of rats and two strains of mice. There is suggestive evidence that links PCBs to liver cancer in humans by the ingestion, inhalation, or dermal pathways. However, this evidence is inadequate due to confounding factors and lack of exposure quantification (4).

There have been several studies attempting to associate PCB exposure with carcinogenicity. In New Jersey, a petrochemical plant reported a statistically significant increase in malignant melanomas among 31 research and development employees and 41 refinery workers. Because the study failed to report quantified exposure levels and to identify the presence of other potential or known carcinogens, it was discredited (4).

Two outbreaks of poisoning following accidental consumption of PCB-contaminated rice oil (also containing polychlorinated dibenzofurans and polychlorinated quinones) occurred in Japan in 1968 (Yusho) and in Taiwan in 1979 (Yu-Cheng). A 16-year mortality study was completed which identified an increase in liver cancer in both males and females. There is strong evidence indicating the health effects were attributable to the polychlorinated dibenzofurans in the oil as opposed to the PCBs. Therefore, this study only suggests carcinogenicity of PCBs (4).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

PCBs have the capability to bioaccumulate and biomagnify. For rainbow trout, bluegills and channel catfish, the 96-hour LC50 values were around 20 mg/liter. When the exposure was increased to 10 to 20 days, the average LC50 value was 0.1 mg/liter. Studies indicate that juvenile organisms appear to be more susceptible to PCBs than either eggs or adults (3).

A study which experimentally determined the bioconcentration factors of various Aroclors in aquatic species found bioconcentration factors ranging from 26,000 to 660,000 (2).

In a study conducted by the U.S. Fish and Wildlife Service, 315 fish from 107 stations nationwide were analyzed for PCBs. Results showed that 94% of all fish were found to contain PCB residues. The geometric mean concentration of all Aroclors was found to be 0.53 µg/g. It should be noted that this study included the analyses of whole fish samples which include both the edible and nonedible portions of the fish. Therefore, the concentration will not reflect the actual human exposure through oral consumption (2).

Subsequent studies have shown PCB levels in fish collected and analyzed from Lake Huron to contain 600 to 72,000 µg/g PCBs on a lipid basis. Analyses of 62 samples of commercial fish collected from Lake Ontario revealed PCB levels ranging from 0.11 to 4.90 ppm (2).

The Ambient Water Quality Criteria for the protection of aquatic organisms are as follows (3):

Freshwater:

Acute toxicity: 2.0 µg/L
Chronic toxicity: 0.014 µg/L

Marine:

Acute toxicity: 10.0 µg/L
Chronic toxicity: 0.030 µg/L

Terrestrial and Avian

PCBs can affect terrestrial wildlife in three primary ways: mortality, adversely affecting reproduction, and changing behavior. Behavior effects include increased activity, decreased avoidance response, and decreased nesting (3).

In sensitive bird species, PCB levels of greater than 200 ppm in the diet or 10 mg/kg body weight caused some mortality. When the doses were increased to 1,500 ppm or 100 mg/kg body weight, extensive mortality was exhibited (3).

In studies in which chicken were fed levels of 20 ppm PCBs in the diet, lower egg production, deformities, decreased hatchability, lower growth, and survival were observed (3).

REGULATORY LEVELS AND CRITERIA

OSHA Advisory TWA (2): Aroclor 1242 - 1.0 mg/m3
Aroclor 1254 - 0.5 mg/m3

FDA Temporary Tolerances (2): Foods - 0.2-3.0 ppm
Packaging - 10.0 ppm

NIOSH: REL-TWA (2): 1.0 µg/m3

ACGIH (2):

TLV-TWA for Aroclor 1242: 1.0 mg/m3

TLV-TWA for Aroclor 1254: 0.5 mg/m3

Ambient Water Quality Criteria (2): 0.79 to 0.0079 ng/L for carcinogenicity at 10-5 to 10-7 risk levels

Drinking Water Criteria (2): 0.5 to 0.005 µg/L for carcinogenicity at 10-4 to 10-6 risk levels

Reportable Quantity (2): 10 lbs. (statutory)
1 lb. (proposed)

SUMMARY OF TOXICOLOGICAL INDICES

EPA Carcinogenic Classification (6) Group: B2-Probable human carcinogen

Noncarcinogenic Effects:

Oral RfD (4):	Not Available
Inhalation RfC (4):	Not Available

Carcinogenic Effects:

Oral CSF(4):	7.7 $(mg/kg/day)^{-1}$
Inhalation CSF (4):	Not Available.

REFERENCES

1. Hawley, G.G. The Condensed Chemical Dictionary-Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

2. Toxicological Profile for Selected PCBs (Aroclor-1260,-1254,-1248,-1242,-1232,-1221, and -1016). U.S. Agency for Toxic Substances and Disease Registry. U.S. Public Health Service, and U.S. Environmental Protection Agency, Atlanta, Georgia. June 1989.

3. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

4. IRIS. Integrated Risk Information System. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 1993.

5. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. January 1991.

6. SPHEM. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C. October 1986.

Date of Last Revision: 1/8/93
Revisor: Susan C. Johnston

POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)

INTRODUCTION

The PAHs are a diverse class of compounds consisting of two or more substituted and unsubstituted polycyclic aromatic rings formed by the incomplete combustion of carbonaceous materials. PAHs are ubiquitous in the modern environment and commonly are constituents of coal tar, soot, vehicular exhausts, cigarette smoke, certain petroleum products, road tar, mineral oils, creosote and many cooked foods.

The physiochemical properties of the various PAHs are shown on Table 1.

FATE AND TRANSPORT

Other than naphthalene, the PAHs can be separated into two major groups based on chemical and physical properties relevant to their fate and transport. Table 2 lists the PAHs belonging to the anthracene group and benzo(a)pyrene group. The following paragraphs discuss the groups' fate and environmental pathways.

The Anthracene Group: (anthracene, acenaphthene, acenaphthalene, fluoranthene, fluorene, phenanthrene and pyrene): The majority of the information presented below is specific to anthracene. However, the properties and fate characteristics of anthracene are considered to be representative of the other PAHs in this group.

Under ambient conditions, atmospheric anthracene will exist predominantly (approximately 90%) in the vapor phase with very little adsorption to aerosols. Anthracene can be returned to aquatic and terrestrial systems by wet and dry deposition; however, the majority of the deposition will be dry. A significant amount of airborne anthracene may be removed and deposited near combustion sources. The anthracene remaining in the air will probably undergo photoxidation to quinones and other oxygenated compounds (8).

Table 1

POLYNUCLEAR AROMATIC HYDROCARBON PHYSICAL AND CHEMICAL INFORMATION

	Formula	Water Solubility* (mg/l)	Vapor Pressure* (torr)	Henry's Law Constant (atm-m3/mole)	Log K_{oc}	Log Kow
Anthracene	$C_{14}H_{10}$	0.045	2.4×10^{-4}	1.25×10^{-3}	4.20	4.45
Acenaphthene	$C_{12}H_{10}$	3.47	1.5×10^{-3}	1.5×10^{-4}	1.25	3.97
Acenaphthylene	$C_{12}H_8$	3.42	1.6×10^{-3}	9.33×10^{-5}	3.72	4.33
Fluoranthene	$C_{16}H_{10}$	0.26	5×10^{-6}	5.12×10^{-6}	4.64	5.33
Fluorene	$C_{13}H_{10}$	1.69	1×10^{-2}	1.29×10^{-3}	3.65	4.18
Phenanthrene	$C_{14}H_{10}$	1.0	9.6×10^{-4}	2.25×10^{-4}	4.20	4.46
Pyrene	$C_{16}H_{10}$	0.14	2.5×10^{-6}	4.75×10^{-6}	4.64	5.32
Benzo[a]pyrene	$C_{20}H_{12}$	3.8×10^{-3}	5.6×10^{-9}	4.89×10^{-7}	--	6.08
Benzo[a]anthracene	$C_{18}H_{12}$	5.7×10^{-3}	2.2×10^{-8}	7.34×10^{-7}	5.34	5.61
Benzo[b)fluoranthene	$C_{20}H_{12}$	1.0×10^{-3}	5.0×10^{-7}	1.66×10^{-4}	--	6.08
Benzo[k]fluoranthene	$C_{20}H_{12}$	5.5×10^{-4}	5.0×10^{-7}	3.02×10^{-4}	--	6.08
Benzo[g,h,i]perylene	$C_{22}H_{12}$	3.0×10^{-4}	1.0×10^{-10}	1.21×10^{-7}	--	6.51
Chrysene	$C_{12}H_{12}$	1.8×10^{-3}	6.3×10^{-9}	1.05×10^{-6}	5.34	5.61
Indeno[1,2,3-c,d]pyrene	$C_{22}H_{12}$	5.0×10^{-4}	1.0×10^{-10}	6.0×10^{-10}	--	6.51

*Values expressed at 25°C.
Source: Ref. 8

Table 2

MAJOR GROUPINGS OF POLYNUCLEAR AROMATIC HYDROCARBONS*

THE ANTHRACENE GROUP

Anthracene

Acenaphthene

Acenaphthylene

Fluoranthene

Fluorene

Phenanthrene

Pyrene

THE BENZO[a]PYRENE GROUP

Benzo[a]anthracene

Benzo[a]pyrene

Benzo[b]fluoranthene

Benzo[g,h,i]perylene

Benzo[k]fluoranthene

Chrysene

Dibenzo[a,h]anthracene

Indeno[1,2,3-c,d]pyrene

* Note: Naphthalene is addressed in a separate toxicity profile.

Dissolved anthracene can undergo some removal from surface waters via volatilization, but its low vapor pressure (2.4 x 10^{-4} torr at 25°C) prevents this from being a significant transport pathway. A half-life of 16 hours for anthracene was reported in the aquatic environment under maximum volatilization conditions (6). With a log octanol-water partition coefficient of 4.45, anthracene has a very strong tendency to partition from water to other environmental media. Adsorption and sedimentation are the primary environmental fates in aquatic systems with absorption both organic and non-organic particulate matter (6).

Anthracene in the aquatic system will tend to accumulate preferentially in the sediment and remain there unless considerable mixing at the sediment/water column interface occurs. In rivers, the major fate pathway is transport of sediment-adsorbed anthracene to the oceans, since neither photolysis or anaerobic degradation are important fate pathways. Depending on the actual conditions in the environment, biotransformation could be an important fate process (6).

Biological processes such as uptake, depuration, and biodegradation are considered potential environmental fate mechanisms for anthracene. Bioaccumulation of anthracene is probably short-term, especially for vertebrates. Biodegradation by microorganisms may also be a significant fate process (6). Half-lives on the order of 1-2 weeks under laboratory conditions were reported for the anthracene group.

<u>The Benzo[a]pyrene Group: (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, indeno[1,2,3-c,d]pyrene)</u>: The majority of the information presented below is specific to benzo[a]pyrene; however, the properties and fate characteristics of benzo[a]pyrene are considered to be representative of the other PAHs in this group.

Under ambient conditions, atmospheric benzo[a]pyrene will exist predominantly (approximately 99%) adsorbed to aerosols. Benzo[a]pyrene can be returned to aquatic and terrestrial systems by wet and dry deposition; however, the majority of the deposition will be dry. A significant amount of airborne benzo[a]pyrene may be removed and deposited near combustion sources. The physical removal mechanisms are expected to be significant with an atmospheric residence time of approximately eight days (6).

Dissolved benzo[a]pyrene can undergo some removal from surface waters via volatilization, but its very low vapor pressure (5.6 x 10^{-9} torr at 25°C) prevents this from being significant. A

half-life of 430 hours for benzo[a]pyrene was reported in aquatic environments under maximum volatilization conditions (6).

With a log octanol-water partition coefficient of 6.08, benzo[a]pyrene has a very strong tendency for water-lipid and water-sediment partitioning. Adsorption and sedimentation represent primary environmental pathways in aquatic systems through adsorption both organic and non-organic particulate matter (6).

Benzo[a]pyrene in aquatic systems will accumulate preferentially in sediments and tend to remain there unless considerable mixing occurs at the sediment/water column interface. In rivers, the major fate pathway is transport of adsorbed benzo[a]pyrene to oceans. Photolysis and biotransformation can also be an important fate processes (6).

Biological processes such as uptake, depuration, and biodegradation are considered potential environmental fate mechanisms for benzo[a]pyrene. Bioaccumulation of benzo[a]pyrene is probably short-term, especially for vertebrates. Biodegradation by microorganisms is slower and not as extensive in the benzo[a]pyrene group as in the lower-molecular-weight PAHs (6). Half-lives on the order of months or longer under laboratory conditions were reported for the benzo[a]pyrene group.

PHARMACOKINETICS

No studies have been located concerning the absorption of PAHs via inhalation and oral ingestion. However, it can be inferred from the presence of urinary metabolites in workers exposed to PAHs that absorption occurs via inhalation. Rats orally administered PAHs showed elevated concentrations in the liver, lung and kidneys (11). In terms of dermal exposure, measurable quantities of PAHs were detected in blood after percutaneous exposure in humans (11).

PAHs were distributed to the lung, kidney, liver and gastrointestinal tract of rats following exposure via inhalation. Orally administered PAHs in the same species were detected in the liver, lung and kidney. Very little of the PAHs absorbed through the skin are distributed to tissues (11).

The lipophicity of PAHs enables them to readily penetrate cellular membranes and circulate in the body indefinitely. However, metabolic processes alter PAHs both chemically and structurally producing more water-soluble and excretable compounds. These metabolic processes occur in all tissues. The following metabolic pathway is that of benzo[a]pyrene and is similar to that of the other PAHs. Benzol[a]pyrene is initially metabolized by the microsomal P-450 system to form an arene oxide. Once the arene oxide if formed, it undergoes hydration via epoxide hydroluse to form a dihydrodiol. Further metabolic activity can lend to the generation of a bay region epoxide which is believed responsible for BaPs toxic effects. Benzo[a]pyrene can also be oxidized spontaneously or metabolically to quinones (11).

In terms of elimination, animal studies suggest that PAHs are eliminated rapidly from the lung when the animals are exposed via inhalation (11). Rats orally exposed to PAHs excreted the compounds in the feces (11). PAHs applied to the skin of rats were determined to be excreted in the urine and feces equally (11).

HUMAN HEALTH EFFECTS

For practical purposes, PAHs are often separated into two categories, the carcinogenic and non-carcinogenic PAHs. This is a somewhat misleading categorization as some evidence exists that many of the non-carcinogenic PAHs have some, albeit weak, carcinogenic activity or act as promoters or co-carcinogens. Another factor complicating PAH categorization is that they do not occur alone in nature but as complex mixtures containing numerous PAHs of varying carcinogenic potencies. The potential interactions of the individual PAHs present as components of these mixtures must be addressed in attempting to quantify the carcinogenic and non-carcinogenic risks (7).

The approach adopted by the USEPA as the basis for risk characterization is to apply a carcinogenic slope factor (CSP) and a reference dose (RfD) to the subclass of carcinogenic and non-carcinogenic PAHs, respectively, within the mixture that is to be assessed. The CSP for carcinogenic PAHs is calculated from toxicological studies using benzo[a]pyrene while the RfD for non-carcinogenic PAHs without verified values is calculated from toxicological studies using pyrene. The toxicity equivalency factor (TEFs) methodology developed by the USEPA has been applied to the carcinogenic PAHs. TEFs have been established based on each compounds relative potency to the potency of BaP. Table 3 presents the TEFs for the various PAHs. Although there is limited empirical evidence to support assumptions (2) and (3),

Table 3

TOXICITY EQUIVALENCY FACTORS FOR PAHs

Compound	TEF
Benzo[a]pyrene	1.0
Benzo[a]anthracene	0.1
Benzo[b)fluoranthene	0.1
Benzo[k]fluoranthene	0.1
Chrysene	0.01
Dibenzo[a,h]anthracene	1.0
Indeno[1,2,3-c,d]pyrene	0.1

assumption (1) may lead to large overestimates of risk since benzo[a]pyrene is one of the most potent carcinogenic PAHs (6).

The USEPA, in reviewing the carcinogenicity of several PAHs, indicated those for which there was sufficient, limited, or inadequate, evidence of carcinogenicity. These classifications are presented in Table 4.

Benzo[a]anthracene, benzo[a]pyrene, benzo(b)fluoranthene, benzo[g,h,i]anthracene, chrysene and dibenzo[a,h]anthracene are probable human carcinogens. Acenaphthylene, anthracene, benzo[k]fluoranthene, fluoranthene, fluorene, indeno[1,2,3-c,d]pyrene, naphthalene, phenanthrene and pyrene are either possible human carcinogens, the evidence is inadequate to assess carcinogenic potential, or there is no evidence for carcinogenicity (6).

Non-carcinogenic effects: Acute effects from direct contact with PAHs are generally limited to phototoxicity. Percutaneous exposure to PAHs, followed by exposure to sunlight, can result in dermatitis consisting of erythema, itching, and burning. Dermatitis can result from a single 90-minute exposure to a one-percent solution of coal tar. Chronic exposure to PAHs may result in chronic dermatitis, hyperkeratoses, and other skin disorders (1,2,3,4). PAHs have also been shown to cause cytotoxicity in rapidly proliferating cells throughout the body with the hematopoietic system, lymphoid system, and testes frequently noted as targets (10). This effect appears to result from PAH mediated inhibition of DNA replication (6).

The PAHs can also cause systemic toxicity at high doses. The liver and kidney of rats have exhibited slight morphological changes following oral administration of acenaphthene. The major effects linked to naphthalene exposure include cataracts with accompanying retinopathy and hemolytic anemia (6).

A chronic oral RfD of 3×10^{-2} mg/kg/day was established for non-carcinogenic PAHs without EPA values using pyrene as a surrogate. This value was based on exposure of rats to 10-20 mg/day of naphthalene in the diet for six days per week for approximately two years. There currently is no inhalation RfD for naphthalene or other non-carcinogenic PAHs (7).

Carcinogenic effects: Most carcinogenic PAHs are not direct carcinogens but require metabolic activation before carcinogenesis is initiated (6). The metabolites of carcinogenic PAHs have been found to bind to DNA in every tissue examined regardless of species, dose, or route of administration (6).

Table 4

CLASSIFICATION OF PAHs ACCORDING TO EVIDENCE FOR CARCINOGENICITY

Chemicals for which there is sufficient evidence that they are carcinogens:

Benzo(a)anthracene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Chrysene
Dibenzo(a,h)anthracene
Indeno(1,2,3-c,d)pyrene

Chemicals for which the evidence is inadequate to assess their carcinogenicity:

Acenaphthylene
Anthracene
Benzo(g,h,i)perylene
Fluoranthene
Fluorene
Naphthalene
Phenanthrene
Pyrene

In mice, carcinogenic PAHs can produce hepatomas and lung adenomas following repeated oral administration and bladder tumors following implantation. In addition, they can produce tumors in mice following subcutaneous injection (6). Lung tumors have developed in hamsters and mice following intratacheal and intravenous administration, respectively (8).

The oral and inhalation CSFs for benzo[a]pyrene were 7.3 and 6.1 $(mg/kg/day)^{-1}$, respectively (5,7,9,12). The oral CSF was based on the exposure of mice to 1-250 ppm benzo[a]pyrene in the diet for 1-197 days. The inhalation CSF was based on the exposure of hamsters to 2.2-9.5 mg/m^3 benzo[a]pyrene by inhalation for 4.5 hours per day for approximately 100 weeks (6).

REGULATORY LEVELS AND CRITERIA

OSHA PEL (1):	0.2 mg/m^3 (coal tar pitch volatiles - benzene soluble fraction)
ACGIH LTV TWA (11):	0.2 mg/m^3 (coal tar pitch volatiles - benzene soluble fraction)
NIOSH REL TWA (11):	0.1 mg/m^3 (benzene soluble PAH)
IDLH (11):	400 mg/m^3 (coal tar pitch volatiles)
Reportable Quantity (11):	1 lb

REFERENCES

1. ATSDR 1987a. Agency for Toxic Substances and Disease Registry. Toxicological Profile for Benzo[a]Pyrene (Draft). Atlanta, Georgia. October 1987.

2. ATSDR 1987b. Agency for Toxic Substances and Disease Registry. Toxicological Profile for Benzo[b]Fluoranthene (Draft). Atlanta, Georgia. November 1987.

3. ATSDR 1987c. Agency for Toxic Substances and Disease Registry. Toxicological Profile for Benzo[a]Anthracene (Draft). Atlanta, Georgia. October 1987.

4. ATSDR 1987d. Agency for Toxic Substances and Disease Registry. Toxicological Profile for Chrysene (Draft). Atlanta, Georgia. October 1987.

5. U. S. Environmental Protection Agency, 1980. Ambient Water Quality Criteria for Polynuclear Aromatic Hydrocarbons. Office of Water Regulations and Standards, Washington, D.C. October 1980. EPA 440/5-80-069.

6. U. S. Environmental Protection Agency, 1982. An Exposure and Risk Assessment for Benzo[a]Pyrene and Other Polycyclic Aromatic Hydrocarbons. Vols. I-IV. Office of Water Regulations and Standards. Washington, D.C. 1982. EPA 440/4-85-020-VI.

7. U. S. Environmental Protection Agency, 1984. Health Effects Assessment for Polycyclic Aromatic Hydrocarbons (PAHs). Environmental Criteral and Assessment Office, Cincinnati, Ohio. September 1984. EPA 540/1-86-013.

8. U. S. Environmental Protection Agency, 1985. Chemical, Physical, and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Remedial Response. Washington, D.C. September 1985.

9. U. S. Environmental Protection Agency, 1986. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response. Washington, D.C. October 1986. EPA 540/1-86-060.

10. Santodonato 1981. Santodonato, J., Howard, P., and Basu, D. 1981. Health and Ecological Assessment of Polynuclear Aromatic Hydrocarbons. Journal of Environmental Pathology and Toxicology. 5:1-364.

11. Toxicological Profile for Polycyclic Aromatic Hydro Carbons (Draft). Agency for Toxic Substances and Disease Registry, U.S. Public Health Service and the U.S. EPA Atlanta, GA. October 1989.

12. IRIS. Integrated Risk Information System. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 1993.

Date of Last Revision: 3/19/93

Revisor: Rich Hoff

TOLUENE

INTRODUCTION

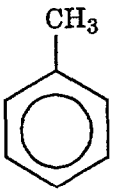
Chemical Name: Toluene

CAS Number: 108-88-3

Molecular Formula: $C_6H_5CH_3$

Molecular Weight: 92 g/mole

Chemical Structure:



Toluene is a colorless liquid at standard temperature and pressure. It is primarily used as a component in gasoline but is also used in the synthesis of benzene, methane foams and other organic chemicals (1).

FATE AND TRANSPORT

Log K_{oc} (1): 2.47

Log K_{ow} (2): 2.73

$t_{1/2}$:

Air: 1.3 days

Surface Water: 0.17 day

Henry's Law Constant (2): 6.66×10^{-3} atm - m^3/mol

BCF (4): 10.7

Degradation Products (1): Simple hydrocarbons

Solubility:

In Water (2): 535 mg/L

In Organics(3,4): Soluble in acetone, ligroin, and carbon disulfide, and miscible with alcohol ether, benzene, chloroform, glacial acetic acid, and other organic solvents

Vapor Pressure (1): 22 mm Hg @ 20°C

Specific Gravity (3): 0.866 @ 20/4°C

Toluene can be present in the air, water, and soil. The low vapor pressure indicates that volatilization is the most probable route of transport among medium.

Photooxidation is the primary fate mechanism for atmospheric toluene. In the atmosphere, it is readily degraded by reacting with hydroxyl radicals resulting in benzaldehyde and cresols. Benzaldehyde is the principal organic product of this atmospheric conversion (1). These rings undergo cleavage to form simple hydrocarbons. Toluene is also oxidized by reacting with nitrogen dioxide, oxygen, and ozone (1).

Volatilization is a primary means of transport from surface water (1). This volatilization from water depends on the turbulence of the water. Toluene in static water has a half-life of one to six days. In turbulent water, the half-life is reduced to five to six hours. In the aquatic environment, toluene can also be oxidized by a reaction similar to that of atmospheric toluene. However, the rate of the reaction is much slower. Degradation of toluene that is not volatilized is primarily through microbial action (1).

The partition coefficients in conjunction with water solubility indicate that toluene would tend to leach into groundwater (1).

The primary route of transport from surface soil is volatilization. The rate of evaporation from soil depends on environmental setting characteristics such as temperature, humidity, and soil type. In general, more than 90 percent of toluene present in soil vaporizes within the first 24 hours. Toluene that has not evaporated from soil is rapidly biodegraded by various bacterial species (1).

Toluene has a low to moderate tendency to bioaccumulate in lipophilic tissues (1). Consequently, bioaccumulation is most likely not a significant environmental fate process (4).

PHARMACOKINETICS

Toluene readily enters the body via inhalation and ingestion and to a lesser degree, by dermal contact. In human volunteers exposed to toluene via inhalation, uptake was found to be rapid. This rapid uptake was demonstrated by a high correlation between the alveolar and arterial concentrations of toluene that were measured during and after exposure (4). Studies of laboratory animals show that absorption following oral exposure to toluene is less rapid than by inhalation. Maximum blood levels following inhalation were reached in fifteen to thirty minutes whereas maximum blood levels after oral exposure were reached in two to three hours after exposure (4).

It has been demonstrated that human dermal absorption of toluene is slow. Two human volunteers soaked areas of their body with toluene for five minutes resulting in a maximum blood concentration of 5.4 µmol/l (4).

Animal studies indicate that once toluene enters the body it tends to accumulate in adipose tissue, bone marrow, body fat, spinal nerves, the spinal cord, and white brain matter. Moderately high concentrations of toluene and its metabolities were found in the liver and kidneys (1).

The majority of toluene absorbed into the body is rapidly metabolized. The metabolic end products include hipparic acid (60-70%); benzoyl glucuronide (10-20%); and o- and, p-cresol (<1%) (1).

Excretion of toluene and its metabolites usually occurs within the first 12 hours after exposure. Metabolic products of toluene are excreted in the urine while unmetabolized toluene is excreted by exhalation (1).

HUMAN HEALTH EFFECTS

Noncarcinogenic

The most profound effect from inhalation exposure to toluene occurs in the central nervous system (CNS). Chronic exposure to moderate and/or high concentrations is associated with reversible CNS disturbances and impaired neuromuscular function. Irreversible damage has

been associated with long-term exposure to high concentrations in solvent users. Human studies indicate that chronic inhalation of toluene can irritate the respiratory tract (1).

Current studies suggest that toluene exposure by inhalation can result in decreased leukocyte counts in the blood. However, this effect in earlier studies was attributable to benzene which is a contaminant in toluene. More recent research indicates that toluene affects the blood but is not the primary target organ (1).

Absorption of toluene can occur through the skin, although this route of exposure is minor compared to inhalation. Direct contact with toluene can moderately irritate skin and eyes (1). No studies were located examining the toxicity of toluene when administered by the oral route (1).

Developmental effects have been observed in animal studies but evidence for human developmental effects is inconclusive. Toluene is not a reproductive toxicant by either inhalation or ingestion (1).

Populations at a greater risk from toluene exposure include those who experience the following: asthma, respiratory difficulties and cardiovascular disease. Additionally, the elderly, cigarette smokers, and chronic alcohol drinkers are more sensitive to toluene exposure (1).

The chronic oral RfD, for toluene, is $2x10^{-1}$ mg/kg/day. This value is based on CNS effects, eye and nose irritation, and changes in liver and kidney weights. An uncertainty factor of 1000, based on inter- and intraspecies extrapolations, subchronic to chronic extrapolation, and limited reproductive and developmental toxicity data, was applied to the NOAEL in calculating the RfD.

An inhalation RfC of 0.4 mg/m^3 is also available for toluene (5).

Carcinogenic Effects

This chemical is among the substances being evaluated by EPA for evidence of human carcinogenic potential (5).

One animal study showed that dermally administered toluene markedly inhibits skin tumorigenesis in a two stage mouse model utilizing phorbol-12-myristate-13-acetate (PMA) as a promoter. It is speculated from the results of this study that toluene competes for the PMA receptor site; or it may interfere with biochemical processes in cell membranes or in the intercellular cascade between membrane and nucleus (1).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

Available data are not adequate to develop ambient water quality criteria. Consequently, EPA has reported the lowest effects level as criteria. These values are as follows:

Freshwater (5,6):

Acute toxicity: 17,500 µg/L

Chronic toxicity: Not available

Marine (5,6):

Acute toxicity: 6,300 µg/L

Chronic toxicity: 5,000 µg/L

Terrestrial and Avian

Information regarding the toxicity of toluene to terrestrial and avian wildlife and domestic animals was not found in the available literature.

REGULATORY LEVELS AND CRITERIA

ACGIH	TWA (1):	100 ppm
	STEL (1):	150 ppm
OSHA	TWA (1):	100 ppm
	STEL (1):	150 ppm
Reportable Quantity (1):		1,000 lbs
NIOSH	TWA (1):	100 ppm
	Ceiling (1):	200 ppm
MCGL (proposed):		2.0 mg/L

Health Advisories:	
1-day:	21.5 mg/L
10 day:	3.46 mg/L
Longer-term (chill):	3.46 mg/L
Lifetime:	2.42 mg/L
Ingestion of Water and Organisms:	14.3 mg/L
Ingestion of Organisms Only:	424 mg/L
MCL (8):	1.0 mg/L

SUMMARY OF TOXICOLOGICAL INDICES

EPA Carcinogenic Classification (1):	Group D-Not Classified as to human carcinogenocity
Oral RfD (5):	2×10^{-1} mg/kg/day
Inhalation RfC (5):	0.4 mg/m^3

REFERENCES

1. Toxicological Profile for Toluene. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. December 1989.

2. SPHEM. Superfund Public Health Evaluation Manual. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C. October 1986.

3. Hawley, G.G. The Condensed Chemical Dictionary - Eleventh Edition.. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

4. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

5. IRIS. Integrated Risk Information System. Office of Research and Development, U.S Environmental Protection Agency, Washington, D.C. 1993.

6. Ambient Water Quality Criteria. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. May 1986.

7. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U. S. Environmental Protection Agency. January 1991.

8. U. S. Environmental Protection Agency, Federal Register, National Primary Drinking Water Regulations; Final Rule, Vol. 56, No. 20. January 30, 1991.

Date of Last Revision: 3/22/93

Revisor: Rich Hoff

XYLENES (MIXED)

INTRODUCTION

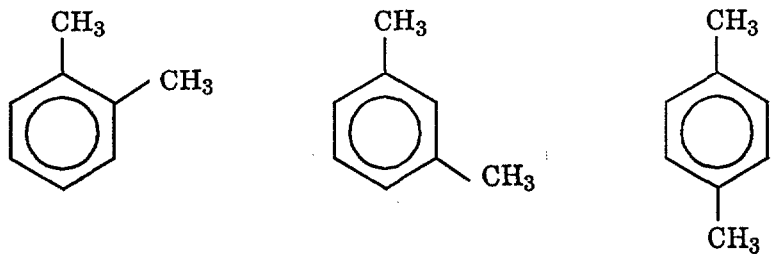
Chemical Name: Xylenes (Mixed)

CAS Number: 1330-20-7

Molecular Formula: $C_6H_4(CH_3)_2$

Molecular Weight: 106.17 g/mole

Chemical Structure: Mixed xylenes are composed of a combination of the following three isomeric forms:



ortho meta para

Mixed xylenes (hereinafter "xylenes") consist of a clear liquid mixture of the ortho, meta, and para isomers of the compound. Xylenes are a common organic solvent used especially as an intermediate for dyes and inorganic synthesis. Xylenes also are used in formulating various aviation fuels (2).

FATE AND TRANSPORT

Log K_{ow} (4): 3.12-3.20

K_{oc} (4): 166

$t_{1/2}$ (5): 100% reduction in 192 hrs in incubated conditions

Henry's Law Constant (4): 5.19×10^{-3} to 7.6×10^{-3} atm-m^3/mol

BCF (4): 2.14-23.6

Degradation Products (5): Toluic Acid, Catechol

Solubility:

In Water (4): 30 ppm @ 25° C

In Organics (4): Miscible with alcohol, ether and other organics

Vapor Pressure (4): 6.16 mm Hg @ 20° C

Specific Gravity (1): 0.86

Xylenes are volatile compounds which ultimately partition into the atmosphere. Their vapor pressures and Henry's Law Constants are indicative of compounds that will tend to migrate fairly rapidly from both surface waters and soils into the air. Xylenes in the atmosphere tend to undergo photooxidation. Direct photolysis is not believed to be a significant degradation process (4).

Spilled xylenes in soil tend to be relatively mobile in subsurface environments by virtue of their water solubility. Because of their ability to desiccate clays, xylenes can open macropores in this soil type thereby further enhancing their transport potential (4).

Xylenes in groundwater and sediments tend to undergo biodegradation. Hydrolysis and oxidation are not significant transformation processes for xylenes in the aquatic environment. Xylenes tend to marginally bioaccumulate in various aquatic species with bioconcentration factors ranging from 2.14 to 23.6 (4).

PHARMACOKINETICS

Xylenes can be absorbed into the systemic circulation following exposure via ingestion, inhalation or dermal contact (4).

Xylenes are most readily absorbed following inhalation and are rapidily absorbed into the circulation via this pathway. The majority of inhaled xylenes are distributed, initially, with the serum proteins with the remainder distributed in the other elements of the serum. Xylenes are ultimately distributed to the adipose tissue (4).

Limited information is available regarding the distribution of xylenes following oral exposure. However, metabolites of xylenes have been shown to be distributed throughout various tissues within two hours of ingestion in experimental animals (4).

Dermal absorption of xylenes has not been quantified (4).

The metabolism and elimination of xylenes are primarily mediated through the oxidation of a side-chain methyl group via microsomal enzymes in the liver to yield toluic acid. These acids are subsequently conjugated with glycine to form methylhippuric acids which are excreted in the urine. This metabolic pathway accounts for the elimination of nearly all absorbed xylenes (4).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

Short-term exposure to high levels of xylenes can cause irritation of the skin, eyes, nose and throat, increased reaction time to visual stimuli, impared memory, stomach discomfort, and changes in the liver and kidney. Both short and long-term exposure can result in a number of effects on the nervous system including headaches, dizziness, confusion, and changes in the sense of balance (4).

EPA has identified a no observed adverse effect level (NOAEL) for xylenes of 179 mg/kg/day. An uncertainty factor of 100 was applied to the NOAEL to account for interspecies extrapolation and for the protection of sensitive individuals to derive an oral RfD of 2.0 mg/kg/day. The RfD is based on hyperactivity, decreased body weight and increased mortality. EPA has given the RfD a confidence base of "medium", since it was derived from a well-designed study in which adequately sized groups of two species were tested over a substantial portion of their lifespan, comprehenisve histopathology was performed, and a NOAEL was defined (3). An inhalation RfD value for mixed xylenes has not been verified. An uncertainty factor of 100 was applied to the NOAEL (27 mg/m^3).

Carcinogenic Effects

EPA has classified xylene mixtures as a Group D carcinogen - not classifiable as to human cancinogenicity. Orally administered xylenes did not result in significant increases in tumor

responses in rats or mice of both sexes (3). There is no evidence available regarding xylenes as human carcinogens.(3)

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

Xylenes have been shown to adversely affect trout populations at concentrations as low as 3.6 mg/L in a continuous flow-through system. The LC_{50} in trout was determined to be 13.5 mg/L. The LC_{50}s for other freshwater species were approximately 30 mg/L. Saltwater species are generally more susceptible to xylene than are freshwater species (1).

Terrestrial and Avian

No information on the toxicity of xylenes to terrestrial wildlife and domestic animals was documented in readily available literature. However, because of the low acute toxicity of xylenes, it is unlikely that they would be toxic to wild or domestic birds and animals under most environmental exposure situations (1).

REGULATORY LEVELS AND STANDARDS

Reportable Quantity (3)		1,000 lbs
MCLG (total) (7)		10 mg/L
OSHA	TWA (4):	100 ppm
	STEL (4):	150 ppm
ACGIH	TVL - TWA (4)	100 ppm
	TVL - STEL (4):	150 ppm

SUMMARY OF CRITERIA

EPA Carcinogenic Classification(3)	D-Not classifiable as to human carcinogenicity
Oral RfD (3)	2.0 mg/kg/day
Inhalation RfC (6)	Unverifiable

REFERENCES

1. Chemical Physical and Biological Properties of Compounds Present at Hazardous Waste Sites, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

2. Hawley, G.G. The Condensed Chemical Dictionary-Eleventh Edition. Van Nostrand Reinhold Company, Inc. New York, New York. 1987.

3. IRIS. Integrated Risk Information System. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 1993.

4. Toxicological Profile for Xylenes (Draft). Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. October 1987.

5. Verschueren, K. Handbook of Environmental Data on Organic Chemicals-Second Edition. Van Nostrand Reinhold Company, Inc. New York, New York. 1983.

6. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. January 1992.

7. U. S. Environmental Protection Agency, Federal Register, National Primary Drinking Water Regulations, Final Rule, Vol. 56, No. 20, January 30, 1991.

Date of Last Revision: 3/19/93

Revisor: Rich Hoff

BENZENE

INTRODUCTION

Chemical Name: Benzene

CAS Number: 71-43-2

Common Name: Annulene, Benzol, Coal naphtha

Molecular Formula: C_6H_6

Molecular Weight: 78.12 g/mole

Chemical Structure:

Benzene appears colorless to light yellow. It is a mobile, nonpolar liquid with a high refractive nature. In the vapor state it burns with a smoky flame emitting an aromatic odor (2).

Benzene is used as a solvent and in the manufacturing of rubber, in oil refineries, chemical plants, retail stations, and shoe manufacturing (2).

FATE AND TRANSPORT

K_{oc} (2): 0.3-100

K_{ow} (4): 1.95 - 2.15

$t_{1/2}$ (6) : Expressed as degradation rate of 200-330 mg/L/day (estuarine)

Henry's Law Constant (7): 5.5×10^{-3} atm- m^3/mole

BCF: Not Available

Degradation Products (7): Benzene glycol, catechol

Solubility (7):

In Water: 1780 mg/L at 25°C

In Organics: Miscible

Vapor Pressure (1): 75 mm Hg at 20°C

Specific Gravity (1): 0.879 at 20°C

Benzene may appear in the ambient air, water, and soil. Although benzene is released into the environment by both natural and man-made sources, the contribution from the man-made source is most significant (4).

The combustion of gasoline is the most significant source of benzene release. Other minor sources are septic tank effluent, structural fires, and exhaled air of smokers (4).

Volatilization is the major transport process while atmospheric destruction of benzene is the most likely fate process (4).

In both soil and surface water, sorption is the primary removal method. Although bioaccumulation of benzene is low, the rate of biodegradation is enhanced by the presence of other hydrocarbons (4).

PHARMACOKINETICS

Benzene can be absorbed into the body by inhalation, ingestion, and dermal contact. Metabolic transformation must occur before benzene can exert its toxic effect. Benzene is distributed to the blood (approx. 30%) and to the bone marrow, adipose tissue, and liver (>50%) (4). Benzene exposure may lead to immunosuppression or sensitization, and cause neurotoxic effects (4).

Humans expire unmetabolized benzene in the breath and phenolic metabolites in the urine. The liver is the major site of benzene metabolism.

Humans eliminate unchanged benzene in exhaled air and as benzene metabolites in urine. Only a small amount of benzene is excreted in the feces (4).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

Acute exposure to moderate concentrations of benzene may cause drowsiness, dizziness, headache, and nausea. If exposure continues, unconsciousness may occur (4). Long-term exposure to benzene may affect normal blood production resulting in severe anemia and internal bleeding (4). Prolonged or repeated dermal absorption of benzene may cause blistering, erythema, and dermatitis (4).

In humans, there is not sufficient evidence to link benzene to spontaneous abortions and miscarriages in pregnant women. Animal studies indicate adverse health effects on unborn test animals (4).

Benzene is genotoxic, causing structural chromosomal aberrations (4).

Carcinogenic Effects

The EPA has classified benzene as a Group A carcinogen - a human carcinogen. It has been determined that prolonged exposure to benzene vapors can result in the development of leukemia (4). The primary epidemiogical study supporting the carcinogenic effects from benzene inhalation indicates that the exposure duration ranged from less than five years to as many as 30 years. Based on this primary study, the EPA has derived a unit risk of 8.3×10^{-6} per $\mu g/m^3$ from which, an inhalation cancer slope factor of 2.9×10^{-2} $(mg/kg/day)^{-1}$ can be derived (3). Although benzene has been shown to be carcinogenic via the inhalation route, data relating the ingestion or dermal route of exposure to carcinogenic effects is insufficient (4). However, the EPA has derived an oral cancer slope factor of 2.9×10^{-2} $(mg/kg/day)^{-1}$ based on the risk posed from the inhalation route of exposure.

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

The available data for benzene indicate that acute toxicity to freshwater life occurs at concentrations as low as 5,300 µg/L. For saltwater aquatic life, acute toxicity occurs at concentrations as low as 700 µg/L (5).

No data concerning chronic exposure to benzene in aquatic organisms is readily available (5).

Terrestrial and Avian

Information regarding the toxicity of benzene to terrestrial and avian wildlife and domestic animals was not found in the available literature.

SUMMARY OF REGULATORY LEVELS AND CRITERIA

EPA Carcinogenic Classification (3):	Class A - Human carcinogen
AWQC (3):	
Ingestion of Water and Organisms:	6.6×10^{-1} µg/L
Ingestion of Organisms Only:	$4.0 \times 10^{+1}$ µg/L
Reportable quantity(3):	10 lbs
ACGIH TLV(4):	30 mg/m^3
STEL(4):	75 mg/m^3
OSHA TWA(4):	30 mg/m^3
Ceiling level(4):	75 mg/m^3
Cancer Slope Factor (oral) (3):	2.9×10^{-2} (mg/kg/day)$^{-1}$
Cancer Slope Factor (inhalation) (3):	2.9×10^{-2} (mg/kg/day)$^{-1}$
MCL (drinking) (3):	0.005 mg/L
MCLG (3):	0 mg/L

SUMMARY OF TOXICOLOGICAL INDICES (3)

U.S. EPA Carcinogenicity Classification:	- B2 probable human carcinogen
Oral RfD:	Not Applicable
Inhalation RfC:	Not Applicable
Inhalation Cancer Unit Risk:	8.3 x 10-6 per µg/m^3
Oral CPF:	2.9×10^{-2} (mg/kg/d)$^{-1}$

REFERENCES

1. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

2. Hawley, G.G. The Condensed Chemical Dictionary - Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

3. IRIS. Integrated Risk Information System. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 1993.

4. Toxicological Profile for Benzene. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. May 1989.

5. Ambient Water Quality Criteria. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. May 1986.

6. Verschueren, K. Handbook of Environmental Data on Organic Chemicals. Van Nostrand Reinhold Company, Inc. New York, New York. 1983.

7. Montgomery, J.H. and L. Welkom. Groundwater Chemicals Desk Reference. Lewis Publishers. Chelsea, Michigan. 1990.

Date of Last Revision: 1/8/93
Revisor: Susan C. Johnston

ZINC

INTRODUCTION

Chemical Name: Zinc
Synonyms (1): Zinc dust; Zinc powder
Trade Names (1,2): Asarco; Blue powder; CI 77945; JASAD; PASCO
CAS Number (1): 7440-66-6
Molecular Formula (1): Zn
Molecular Weight (1): 65.38 g/mole
Chemical Structure (1): Zn

Zinc is a shiny white metal with a bluish-gray luster that exhibits a valence of +2 and has five stable isotopes. It is derived from the pyrometallurgical or distillation process, or the hydrometallurgical or electrolytic process. Among zincs uses are as an alloy in brass, bronze, and die-casting alloys; galvanizing iron; as a fungicide; and as a protective coating for other metals (3).

FATE AND TRANSPORT

Density (1): 7.14
Solubility (1):
In Water: Insoluble
In Organics: Soluble in acetic acid and alkali

Zinc occurs in the environment in the +2 oxidation state in both the suspended and dissolved forms. Sorption to other materials is the dominant environmental fate of zinc. The predominant fate of zinc in an aerobic aquatic system is the sorption of the divalent cation by hydrous iron and manganese oxide, clay minerals, and organic material. The efficiency of these materials in removing zinc from solution varies according to their compositions and concentrations, the pH and salinity of the water (1).

Zinc concentrations in air are relatively low and fairly constant except near industrial sources such as smelters (1).

Zinc is strongly bioaccumulated even in the absence of abnormally high ambient concentrations although does not appear to biomagnify. Although zinc is actively bioaccumulated in aquatic systems, the biota appear to represent a relatively minor sink compared to the sediments (8).

PHARMACOKINETICS

The efficiency with which zinc is absorbed following ingestion has been reported to be approximately 80 percent (4). Information was not available on zinc absorption via other routes of exposure. Zinc is primarily distributed to the prostate gland, liver, bone, muscle, kidney, and pancreas following absorption.

During initial absorption, zinc binds to carrier macromolecules by a process influenced by prostaglandins E2 and F2 and chelated by the tryptophan derivative picolinic acid. Zinc induces metallothionein synthesis in mucosal cells. Zinc also binds to metallothionein in other tissues including liver, salivary glands, intestinal mucosa, and pancreas. In blood, zinc binds principally to albumin and beta-2-macroglobulin proteins. It also binds to the enzyme aced phosphatase which is most abundant in the prostate gland. Binding with metallothionein may be followed by release into the gastrointestinal tract via the salivary glands, intestinal mucosa, pancreas, and liver (5). Urinary excretion constitutes an important route and is correlated quantitatively with dietary zinc intake (5). However, the major route of elimination is in feces. (6).

HUMAN HEALTH EFFECTS

Noncarcinogenic Effects

In humans, death has been exhibited following acute inhalation of zinc chloride. The concentration of zinc chloride was unknown and other chemicals were detected. Therefore, death can not be exclusively attributed to zinc exposure. Death was reported in ferrets and mice following acute and intermediate oral exposure. However, no animal studies addressing the effects of zinc following inhalation exposure were located (1).

The adverse effects of zinc following acute inhalation exposure were limited to the respiratory tract of both humans and animals. Following oral exposure, zinc has been shown to cause adverse effects on the gastrointestinal system. The hematological and renal systems are also affected following acute, intermediate, and chronic exposures in humans and animals (1).

Zinc has been found to reduce the serum HDL-cholesterol levels in humans following intermediate oral exposure. The decrease in HDL levels may increase risk of coronary artery disease (1).

Zinc is essential to maintain one's health. However, ingestion of high levels of zinc present a potential for gastrointestinal disorders in humans and animals such as pancreatic abnormalities and gastrointestinal irritation. Biochemical changes (increased serum amylase levels and hypocalcemia) were evident in humans following ingestion of a zinc chloride solution. Animal studies have shown adverse effects including pancreatic fibrosis and degeneration and necrosis of acinar cells of the pancreas. Zinc has also caused internal bleeding in humans and animals following ingestion of high levels (1).

Respiratory disorders have been observed in humans and animals following acute inhalation exposure to zinc compounds. Acute exposure to high concentrations of zinc oxide in humans cause metal fume fever, and penetrates the alveoli, damages lung tissue and transiently impairs pulmonary function. The same effects have been exhibited in animals. Zinc compounds such as zinc chloride cause more damage to respiratory tissue following inhalation exposure than other compounds (1).

Hematological effects in humans and animals following high level acute, intermediate or chronic oral exposure to zinc and zinc compounds consist of anemia which can be exacerbated by gastrointestinal bleeding. These effects occur over a wide range of concentrations depending upon the species (1).

No adverse hepatic effects were reported following intermediate oral exposure to zinc in humans. This indicates that the liver is not a primary target organ for zinc toxicity. Hepatic necrosis was reported in sheep following acute and intermediate exposure, and enzymatic changes where exhibited in rats exposed following intermediate exposure to zinc (1).

The only renal effects observed were in laboratory animals following intermediate oral exposure to zinc compounds. No adverse renal effects have occurred in humans (1).

In vitro studies suggest that neurological symptoms and lethargy can occur in humans following oral administration of zinc. These studies indicate that zinc inhibits the entry of calcium ions into the nerve terminals, which influences the release of neurotransmitters. Additionally, zinc has been known to be toxic to neurons and glia cells of the central nervous systems (1).

Zinc has retarded fetal growth and altered fetal and maternal concentrations of zinc and copper in rats. Congenital malformations such as exencephaly and rib fusions have been exhibited in offspring of pregnant hamsters injected intravenously with zinc sulfate. There is no evidence of these effects occurring in humans (1).

The EPA has established an oral RfD value of 3.0×10^{-1} mg/kg/day for zinc. This value is based on the administration of 2.14 mg/kg/day (therapeutic dose) of zinc to humans (9).

Carcinogenic Effects

Zinc has not been shown to be carcinogenic. Therefore, the EPA has not assigned a carcinogenicity classification for zinc (1).

Although studies have failed to provide evidence for mutagenicity of zinc, there are indications that zinc is a weak clastogen. Human studies involving the treatment of human lymphocytes in cultures with zinc have shown a slight increase in chromosomal aberrations (1).

ENVIRONMENTAL HEALTH EFFECTS

Aquatic

The EPA has established Ambient Water Quality Criteria for zinc in order to protect freshwater and marine aquatic life. The criteria are as follows (7):

Freshwater:

Acute toxicity: $e^{(0.83[\ln(\text{hardness})] + 1.95)}$ µg/L

Chronic toxicity: 47 µg/L

Marine:

Acute toxicity: 170 µg/L

Chronic toxicity: 58 µg/L

Terrestrial and Avian

Information regarding the toxicity of zinc to terrestrial and avian wildlife or domestic animals was not available.

REGULATORY LEVELS AND CRITERIA

SMCL (8):	5 mg/L
NIOSH Recommended Standard (1):	5 mg/m^3 (zinc oxide)
NIOSH Ceiling Limit (1):	15 mg/m^3 (zinc oxide)
OSHA Standard PEL TWA (1):	5 mg/m^3 (zinc oxide)
Reportable Quantity (1):	1,000 lbs
Permissible Level in bottled water (1):	5.0 mg/L

ACGIH TLV (8):

Compound	TWA	STEL
Zinc chloride fume:	1 mg/m^3	2 mg/m^3
Zinc oxide fume:	5 mg/m^3	10 mg/m^3
Zinc oxide dust:	10 mg/m^3	N/A
Zinc stearate:	10 mg/m^3	20 mg/m^3

SUMMARY OF CRITERIA

Ingestion RfD (9):	3.0×10^{-1} mg/kg/day
NOAEL (9):	2.14 mg/kg/day
Uncertainty Factor (9):	10
Inhalation RfD (9):	1.0×10^{-1} mg/kg/day

REFERENCES

1. Toxicological Profile for Zinc. U.S. Agency for Toxic Substances and Disease Registry, U.S. Public Health Service, and U.S. Environmental Protection Agency. Atlanta, Georgia. December 1989.

2. Sax, Irving N. and Richard J. Lewis, Sr. Hazardous Chemicals Desk Reference. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

3. Hawley, G.G. The Condensed Chemical Dictionary-Eleventh Edition. Van Nostrand Reinhold Company, Inc., New York, New York. 1987.

4. U.S. Environmental Protection Agency (1984). Health Effects Assessment for Zinc (and Compounds). Environmental Criteria and Assessment Office, Cincinnati; and Office of Solid Waste and Emergency Response, Washington, D.C. EPA/540/1-86/048. 47 pp.

5. Klaassen, C.D., M.O. Amdur, and J. Doull, eds. (1986). Casarett and Doull's Toxicology--The Basic Science of Poisons, Third edition. Macmillan, New York. 974 pp.

6. Leonard, A., G.B. Gerber, and F. Leonard (1986). Mutagenicity, carcinogenicity, and teratogenicity of zinc. Mut. Res. 168:343-353.

7. Ambient Water Quality Criteria. Office of Water, U.S. Environmental Protection Agency, Washington D.C. May 1986.

8. Chemical, Physical and Biological Properties of Compounds Present at Hazardous Waste Sites. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. September 1985.

9. HEAST. Health Effects Assessment Summary Tables. Office of Emergency and Remedial Response, U.S. Environmental Protection Agency. January 1991.

APPENDIX 5.B

TARGET LEVEL CALCULATIONS

Rooseve Puerto Rico
CTO . -54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Adults

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING AN ADULT.

PERTINENT EQUATIONS: *CARCINOGENIC CONTAMINANT ACTION LEVELS*

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Rooseve Puerto Rico
CTO -54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Adults

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(a)ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(b)FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(k)FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
CHRYSENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
DIBENZ(ah)ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
INDENO(123-cd)PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
NAPHTHALENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHYLENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
FLUORENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PHENANTHRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(ghi)PERYLENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PENTACHLOROPHENOL	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Aldrin	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
4,4'-DDT	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
4,4'-DDE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
alpha-Chlordane	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
gamma-Chlordane	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Endrin Aldehyde	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Heptachlor	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Endosulfan	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Dieldrin	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PCBs	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TETRACHLOROETHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TRICHLOROETHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
1,1,1-TRICHLOROETHANE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TOLUENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ETHYLBENZENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
XYLENES	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
CADMIUM	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
CHROMIUM	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
LEAD	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
ZINC	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
ARSENIC	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950

Roosev Puerto Rico
CTC -54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Adults

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.30		0.8	0
BENZO(a)ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
BENZO(b)FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
BENZO(k)FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
CHRYSENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.073		79.3	0
DIBENZ(ah)ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.30		0.8	0
INDENO(123-cd)PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
NAPHTHALENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.004	0.0	9922
ACENAPHTHYLENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
ACENAPHTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.060	0.0	148835
FLUORENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.040	0.0	99223
PHENANTHRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.300	0.0	744175
FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.040	0.0	99223
PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.030	0.0	74417
BENZO(ghi)PERYLENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
PENTACHLOROPHENOL	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.800	0.030	7.2	74417
Aldrin	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	17.00	0.00003	0.3	74
4,4'-DDT	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.34	0.0005	17.0	1240
4,4'-DDE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.34	0.0005	17.0	1240
alpha-Chlordane	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.3		4.5	0
gamma-Chlordane	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.3		4.5	0
Endrin Aldehyde	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
Heptachlor	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	4.5	0.0005	1.3	1240
Endosulfan	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.0005	0.0	1240
Dieldrin	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	16		0.4	0
PCBs	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.7		0.8	0
TETRACHLOROETHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.01	0.0	24806
TRICHLOROETHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
1,1,1-TRICHLOROETHANE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.006	0.0	14883
BENZENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.029		199.6	0
TOLUENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.200	0.0	496117
ETHYLBENZENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.100	0.0	248058
XYLENES	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		2.000	0.0	4961165
CADMIUM	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.0005	0.0	2310
CHROMIUM	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.005	0.0	23101
LEAD	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00			0.0	0
ZINC	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.300	0.0	1386076
ARSENIC	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00	1.75		6.2	0

Rooseve[illegible] Puerto Rico
CTO [illegible]-54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Children

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING A CHILD.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Rooseve. Puerto Rico
CTO 1. 7-54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Children

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(a)ANTHRACENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(b)FLUORANTHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(k)FLUORANTHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
CHRYSENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
DIBENZ(ah)ANTHRACENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
INDENO(123-cd)PYRENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
NAPHTHALENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
ACENAPHTHYLENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
ACENAPHTHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
FLUORENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
PHENANTHRENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
ANTHRACENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
FLUORANTHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
PYRENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(ghi)PERYLENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
PENTACHLOROPHENOL	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
Aldrin	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
4,4'-DDT	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
4,4'-DDE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
alpha-Chlordane	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
gamma-Chlordane	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
Endrin Aldehyde	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
Heptachlor	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
Endosulfan	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
Dieldrin	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
PCBs	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
TETRACHLOROETHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
TRICHLOROETHENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
1,1,1-TRICHLOROETHANE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
TOLUENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
ETHYLBENZENE	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
XYLENES	7100	100	1	100	9	0.01	1	1E-06	45	25550	3285
CADMIUM	7100	100	1	100	9	0.001	1	1E-06	45	25550	3285
CHROMIUM	7100	100	1	100	9	0.001	1	1E-06	45	25550	3285
LEAD	7100	100	1	100	9	0.001	1	1E-06	45	25550	3285
ZINC	7100	100	1	100	9	0.001	1	1E-06	45	25550	3285
ARSENIC	7100	100	1	100	9	0.001	1	1E-06	45	25550	3285

Rooseve Puerto Rico
CTO . /-54-SRN
DATE: May 8, 1993
CALCULATION OF SEDIMENT ACTION LEVELS - Trespassing Children

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	7.30		1.0	0
BENZO(a)ANTHRACENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.73		10.2	0
BENZO(b)FLUORANTHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.73		10.2	0
BENZO(k)FLUORANTHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.73		10.2	0
CHRYSENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.073		102.3	0
DIBENZ(ah)ANTHRACENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	7.30		1.0	0
INDENO(123-cd)PYRENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.73		10.2	0
NAPHTHALENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.004	0.0	3842
ACENAPHTHYLENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00			0.0	0
ACENAPHTHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.060	0.0	57632
FLUORENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.040	0.0	38421
PHENANTHRENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00			0.0	0
ANTHRACENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.300	0.0	288158
FLUORANTHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.040	0.0	38421
PYRENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.030	0.0	28816
BENZO(ghi)PERYLENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00			0.0	0
PENTACHLOROPHENOL	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.800	0.030	9.3	28816
Aldrin	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	17.00	0.00003	0.4	29
4,4'-DDT	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.34	0.0005	22.0	480
4,4'-DDE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.34	0.0005	22.0	480
alpha-Chlordane	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	1.3		5.7	0
gamma-Chlordane	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	1.3		5.7	0
Endrin Aldehyde	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00			0.0	0
Heptachlor	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	4.5	0.0005	1.7	480
Endosulfan	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.0005	0.0	480
Dieldrin	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	16		0.5	0
PCBs	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	7.7		1.0	0
TETRACHLOROETHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.01	0.0	9605
TRICHLOROETHENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00			0.0	0
1,1,1-TRICHLOROETHANE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.006	0.0	5763
BENZENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00	0.029		257.6	0
TOLUENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.200	0.0	192105
ETHYLBENZENE	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		0.100	0.0	96053
XYLENES	5.56E-08	7.83E-08	4.32E-07	6.09E-07	1.00E-06	1.00		2.000	0.0	1921053
CADMIUM	5.56E-09	7.83E-08	4.32E-08	6.09E-07	1.00E-06	1.00		0.0005	0.0	767
CHROMIUM	5.56E-09	7.83E-08	4.32E-08	6.09E-07	1.00E-06	1.00		0.005	0.0	7668
LEAD	5.56E-09	7.83E-08	4.32E-08	6.09E-07	1.00E-06	1.00			0.0	0
ZINC	5.56E-09	7.83E-08	4.32E-08	6.09E-07	1.00E-06	1.00		0.300	0.0	460084
ARSENIC	5.56E-09	7.83E-08	4.32E-08	6.09E-07	1.00E-06	1.00	1.75		6.8	0

Roosevel Puerto Rico
CTO . 54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Workers

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING AN ADULT.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Roosevelt [illegible] Puerto Rico
CTO [illegible] 4-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Workers

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
BENZO(a)ANTHRACENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
BENZO(b)FLUORANTHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
BENZO(k)FLUORANTHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
CHRYSENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
DIBENZ(ah)ANTHRACENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
INDENO(123-cd)PYRENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
NAPHTHALENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
ACENAPHTHYLENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
ACENAPHTHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
FLUORENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
PHENANTHRENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
ANTHRACENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
FLUORANTHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
PYRENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
BENZO(ghi)PERYLENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
PENTACHLOROPHENOL	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
Aldrin	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
alpha-BHC	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
beta-BHC	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
delta-BHC	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
gamma-BHC	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
4,4'-DDT	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
4,4'-DDE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
alpha-Chlordane	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
gamma-Chlordane	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
Endosulfan	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
Dieldrin	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
PCBs	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
TETRACHLOROETHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
TRICHLOROETHENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
1,1,1-TRICHLOROETHANE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
BENZENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
TOLUENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
ETHYLBENZENE	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
XYLENES	5300	480	1	250	1	0.01	1	1E-06	70	25550	365
CADMIUM	5300	480	1	250	1	0.001	1	1E-06	70	25550	365
CHROMIUM	5300	480	1	250	1	0.001	1	1E-06	70	25550	365
LEAD	5300	480	1	250	1	0.001	1	1E-06	70	25550	365
ZINC	5300	480	1	250	1	0.001	1	1E-06	70	25550	365
ARSENIC	5300	480	1	250	1	0.001	1	1E-06	70	25550	365

Roosevel Puerto Rico
CTO 1[illegible]-54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Workers

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	7.30		1.8	0
BENZO(a)ANTHRACENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.73		18.4	0
BENZO(b)FLUORANTHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.73		18.4	0
BENZO(k)FLUORANTHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.73		18.4	0
CHRYSENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.073		183.9	0
DIBENZ(ah)ANTHRACENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	7.30		1.8	0
INDENO(123-cd)PYRENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.73		18.4	0
NAPHTHALENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.004	0.0	767
ACENAPHTHYLENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00			0.0	0
ACENAPHTHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.060	0.0	11505
FLUORENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.040	0.0	7670
PHENANTHRENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00			0.0	0
ANTHRACENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.300	0.0	57523
FLUORANTHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.040	0.0	7670
PYRENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.030	0.0	5752
BENZO(ghi)PERYLENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00			0.0	0
PENTACHLOROPHENOL	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.800	0.030	16.8	5752
Aldrin	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.8	0.03	16.8	5752
alpha-BHC	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	6.3	0	2.1	0
beta-BHC	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	1.8	0	7.5	0
delta-BHC	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0	0	0.0	0
gamma-BHC	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	1.3	0.0003	10.3	58
4,4'-DDT	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.34	0.0005	39.5	96
4,4'-DDE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.34	0.0005	39.5	96
alpha-Chlordane	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	1.3		10.3	0
gamma-Chlordane	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	1.3		10.3	0
Endosulfan	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.0005	0.0	96
Dieldrin	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	16		0.8	0
PCBs	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	7.7		1.7	0
TETRACHLOROETHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.01	0.0	1917
TRICHLOROETHENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00			0.0	0
1,1,1-TRICHLOROETHANE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.006	0.0	1150
BENZENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00	0.029		462.8	0
TOLUENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.200	0.0	38349
ETHYLBENZENE	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		0.100	0.0	19174
XYLENES	7.41E-09	6.71E-08	5.19E-07	4.70E-06	1.00E-06	1.00		2.000	0.0	383490
CADMIUM	7.41E-10	6.71E-08	5.19E-08	4.70E-06	1.00E-06	1.00		0.0005	0.0	105
CHROMIUM	7.41E-10	6.71E-08	5.19E-08	4.70E-06	1.00E-06	1.00		0.005	0.0	1053
LEAD	7.41E-10	6.71E-08	5.19E-08	4.70E-06	1.00E-06	1.00			0.0	0
ZINC	7.41E-10	6.71E-08	5.19E-08	4.70E-06	1.00E-06	1.00		0.300	0.0	63177
ARSENIC	7.41E-10	6.71E-08	5.19E-08	4.70E-06	1.00E-06	1.00	1.75	0.0003	8.4	63

Roosevel Puerto Rico
CTO 54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Adults

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING AN ADULT.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Roosevel Puerto Rico
CTO 54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Adults

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(a)ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(b)FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(k)FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
CHRYSENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
DIBENZ(ah)ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
INDENO(123-cd)PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
NAPHTHALENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHYLENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
FLUORENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PHENANTHRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ANTHRACENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
FLUORANTHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PYRENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZO(ghi)PERYLENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PENTACHLOROPHENOL	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Aldrin	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
alpha-BHC	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
beta-BHC	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
delta-BHC	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
gamma-BHC	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
4,4'-DDT	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
4,4'-DDE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
alpha-Chlordane	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
gamma-Chlordane	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Endosulfan	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
Dieldrin	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
PCBs	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TETRACHLOROETHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TRICHLOROETHENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
1,1,1-TRICHLOROETHANE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
BENZENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
TOLUENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
ETHYLBENZENE	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
XYLENES	5300	50	1	100	30	0.01	1	1E-06	70	25550	10950
CADMIUM	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
CHROMIUM	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
LEAD	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
ZINC	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
ARSENIC	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950
COPPER	5300	50	1	100	30	0.001	1	1E-06	70	25550	10950

Rooseve Puerto Rico
CTO . -54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Adults

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.30		0.8	0
BENZO(a)ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
BENZO(b)FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
BENZO(k)FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
CHRYSENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.073		79.3	0
DIBENZ(ah)ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.30		0.8	0
INDENO(123-cd)PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.73		7.9	0
NAPHTHALENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.004	0.0	9922
ACENAPHTHYLENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
ACENAPHTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.060	0.0	148835
FLUORENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.040	0.0	99223
PHENANTHRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
ANTHRACENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.300	0.0	744175
FLUORANTHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.040	0.0	99223
PYRENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.030	0.0	74417
BENZO(ghi)PERYLENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
PENTACHLOROPHENOL	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.800	0.030	7.2	74417
Aldrin	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	17	0.03	0.3	74417
alpha-BHC	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	6.3	0	0.9	0
beta-BHC	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.8	0	3.2	0
delta-BHC	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0	0	0.0	0
gamma-BHC	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.3	0.0003	4.5	744
4,4'-DDT	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.34	0.0005	17.0	1240
4,4'-DDE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.34	0.0005	17.0	1240
alpha-Chlordane	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.3		4.5	0
gamma-Chlordane	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	1.3		4.5	0
Endosulfan	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.0005	0.0	1240
Dieldrin	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	16		0.4	0
PCBs	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	7.7		0.8	0
TETRACHLOROETHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.01	0.0	24806
TRICHLOROETHENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00			0.0	0
1,1,1-TRICHLOROETHANE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.006	0.0	14883
BENZENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00	0.029		199.6	0
TOLUENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.200	0.0	496117
ETHYLBENZENE	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		0.100	0.0	248058
XYLENES	8.89E-08	8.39E-08	2.07E-07	1.96E-07	1.00E-06	1.00		2.000	0.0	4961165
CADMIUM	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.0005	0.0	2310
CHROMIUM	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.005	0.0	23101
LEAD	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00			0.0	0
ZINC	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.300	0.0	1386076
ARSENIC	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00	1.75	0.0003	6.2	1386
COPPER	8.89E-09	8.39E-08	2.07E-08	1.96E-07	1.00E-06	1.00		0.0370	0.0	170949

Roosevelt [illegible] Puerto Rico
CTO 1. [illegible]54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Children

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING A CHILD.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Roosev[illegible] Puerto Rico
CTO [illegible]/-54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Children

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(a)ANTHRACENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(b)FLUORANTHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(k)FLUORANTHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
CHRYSENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
DIBENZ(ah)ANTHRACENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
INDENO(123-cd)PYRENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
NAPHTHALENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
ACENAPHTHYLENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
ACENAPHTHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
FLUORENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
PHENANTHRENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
ANTHRACENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
FLUORANTHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
PYRENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZO(ghi)PERYLENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
PENTACHLOROPHENOL	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
Aldrin	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
alpha-BHC	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
beta-BHC	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
delta-BHC	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
gamma-BHC	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
4,4'-DDT	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
4,4'-DDE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
alpha-Chlordane	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
gamma-Chlordane	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
Endosulfan	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
Dieldrin	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
PCBs	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
TETRACHLOROETHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
TRICHLOROETHENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
1,1,1-TRICHLOROETHANE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
BENZENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
TOLUENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
ETHYLBENZENE	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
XYLENES	5300	100	1	100	9	0.01	1	1E-06	45	25550	3285
CADMIUM	5300	100	1	100	9	0.001	1	1E-06	45	25550	3285
CHROMIUM	5300	100	1	100	9	0.001	1	1E-06	45	25550	3285
LEAD	5300	100	1	100	9	0.001	1	1E-06	45	25550	3285
ZINC	5300	100	1	100	9	0.001	1	1E-06	45	25550	3285
ARSENIC	5300	100	1	100	9	0.001	1	1E-06	45	25550	3285

Roosev( ) Puerto Rico
CT( )-54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Trespassing Children

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	7.30		1.1	0
BENZO(a)ANTHRACENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.73		11.4	0
BENZO(b)FLUORANTHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.73		11.4	0
BENZO(k)FLUORANTHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.73		11.4	0
CHRYSENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.073		114.4	0
DIBENZ(ah)ANTHRACENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	7.30		1.1	0
INDENO(123-cd)PYRENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.73		11.4	0
NAPHTHALENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.004	0.0	4294
ACENAPHTHYLENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00			0.0	0
ACENAPHTHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.060	0.0	64412
FLUORENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.040	0.0	42941
PHENANTHRENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00			0.0	0
ANTHRACENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.300	0.0	322059
FLUORANTHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.040	0.0	42941
PYRENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.030	0.0	32206
BENZO(ghi)PERYLENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00			0.0	0
PENTACHLOROPHENOL	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.800	0.030	10.4	32206
Aldrin	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.8	0.03	10.4	32206
alpha-BHC	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	6.3	0	1.3	0
beta-BHC	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	1.8	0	4.6	0
delta-BHC	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0	0	0.0	0
gamma-BHC	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	1.3	0.0003	6.4	322
4,4'-DDT	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.34	0.0005	24.6	537
4,4'-DDE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.34	0.0005	24.6	537
alpha-Chlordane	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	1.3		6.4	0
gamma-Chlordane	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	1.3		6.4	0
Endosulfan	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.0005	0.0	537
Dieldrin	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	16		0.5	0
PCBs	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	7.7		1.1	0
TETRACHLOROETHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.01	0.0	10735
TRICHLOROETHENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00			0.0	0
1,1,1-TRICHLOROETHANE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.006	0.0	6441
BENZENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00	0.029		287.9	0
TOLUENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.200	0.0	214706
ETHYLBENZENE	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		0.100	0.0	107353
XYLENES	4.15E-08	7.83E-08	3.23E-07	6.09E-07	1.00E-06	1.00		2.000	0.0	2147059
CADMIUM	4.15E-09	7.83E-08	3.23E-08	6.09E-07	1.00E-06	1.00		0.0005	0.0	780
CHROMIUM	4.15E-09	7.83E-08	3.23E-08	6.09E-07	1.00E-06	1.00		0.005	0.0	7799
LEAD	4.15E-09	7.83E-08	3.23E-08	6.09E-07	1.00E-06	1.00			0.0	0
ZINC	4.15E-09	7.83E-08	3.23E-08	6.09E-07	1.00E-06	1.00		0.300	0.0	467949
ARSENIC	4.15E-09	7.83E-08	3.23E-08	6.09E-07	1.00E-06	1.00	1.75	0.0003	6.9	468

Rooseve Puerto Rico
CTC 54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Base Personnel

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING AN ADULT.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Rooseve Puerto Rico
CTO -54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Base Personnel

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
BENZO(a)ANTHRACENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
BENZO(b)FLUORANTHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
BENZO(k)FLUORANTHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
CHRYSENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
DIBENZ(ah)ANTHRACENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
INDENO(123-cd)PYRENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
NAPHTHALENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
ACENAPHTHYLENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
ACENAPHTHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
FLUORENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
PHENANTHRENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
ANTHRACENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
FLUORANTHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
PYRENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
BENZO(ghi)PERYLENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
PENTACHLOROPHENOL	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
4,4'-DDT	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
4,4'-DDE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
alpha-Chlordane	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
gamma-Chlordane	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
Endosulfan	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
PCBs	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
TETRACHLOROETHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
TRICHLOROETHENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
1,1,1-TRICHLOROETHANE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
BENZENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
TOLUENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
ETHYLBENZENE	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
XYLENES	2000	50	1	250	25	0.01	1	1E-06	70	25550	9125
CADMIUM	2000	50	1	250	25	0.001	1	1E-06	70	25550	9125
CHROMIUM	2000	50	1	250	25	0.001	1	1E-06	70	25550	9125
LEAD	2000	50	1	250	25	0.001	1	1E-06	70	25550	9125
ZINC	2000	50	1	250	25	0.001	1	1E-06	70	25550	9125
ARSENIC	2000	50	1	250	25	0.001	1	1E-06	70	25550	9125

Roosev( ) Puerto Rico
CTC /-54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Base Personnel

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	7.30		0.6	0
BENZO(a)ANTHRACENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.73		6	0
BENZO(b)FLUORANTHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.73		6	0
BENZO(k)FLUORANTHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.73		6	0
CHRYSENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.073		56	0
DIBENZ(ah)ANTHRACENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	7.30		0.6	0
INDENO(123-cd)PYRENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.73		6	0
NAPHTHALENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.004	0	5840
ACENAPHTHYLENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00			0	0
ACENAPHTHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.060	0	87600
FLUORENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.040	0	58400
PHENANTHRENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00			0	0
ANTHRACENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.300	0	438000
FLUORANTHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.040	0	58400
PYRENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.030	0	43800
BENZO(ghi)PERYLENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00			0	0
PENTACHLOROPHENOL	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.800	0.030	5	43800
4,4'-DDT	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.34	0.0005	12	730
4,4'-DDE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.34	0.0005	12	730
alpha-Chlordane	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	1.3		3	0
gamma-Chlordane	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	1.3		3	0
Endosulfan	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.0005	0	730
PCBs	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	7.7		1	0
TETRACHLOROETHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.01	0	14600
TRICHLOROETHENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00			0	0
1,1,1-TRICHLOROETHANE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.006	0	8760
BENZENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00	0.029		141	0
TOLUENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.200	0	292000
ETHYLBENZENE	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		0.100	0	146000
XYLENES	6.99E-08	1.75E-07	1.96E-07	4.89E-07	1.00E-06	1.00		2.000	0	2920000
CADMIUM	6.99E-09	1.75E-07	1.96E-08	4.89E-07	1.00E-06	1.00		0.0005	0	983
CHROMIUM	6.99E-09	1.75E-07	1.96E-08	4.89E-07	1.00E-06	1.00		0.005	0	9827
LEAD	6.99E-09	1.75E-07	1.96E-08	4.89E-07	1.00E-06	1.00			0	0
ZINC	6.99E-09	1.75E-07	1.96E-08	4.89E-07	1.00E-06	1.00		0.300	0	589615
ARSENIC	6.99E-09	1.75E-07	1.96E-08	4.89E-07	1.00E-06	1.00	1.75		3	0

Roosev , Puerto Rico
CT -54-SRN
Date: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Residential Children

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING A CHILD.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Roosev , Puerto Rico
CTC -54-SRN
Date: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Residential Children

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
BENZO(a)ANTHRACENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
BENZO(b)FLUORANTHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
BENZO(k)FLUORANTHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
CHRYSENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
DIBENZ(ah)ANTHRACENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
INDENO(123-cd)PYRENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
NAPHTHALENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
ACENAPHTHYLENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
ACENAPHTHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
FLUORENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
PHENANTHRENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
ANTHRACENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
FLUORANTHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
PYRENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
BENZO(ghi)PERYLENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
PENTACHLOROPHENOL	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
Aldrin	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
alpha-BHC	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
beta-BHC	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
delta-BHC	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
gamma-BHC	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
4,4'-DDT	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
4,4'-DDE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
alpha-Chlordane	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
gamma-Chlordane	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
Endosulfan	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
Dieldrin	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
PCBs	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
TETRACHLOROETHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
TRICHLOROETHENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
1,1,1-TRICHLOROETHANE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
BENZENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
TOLUENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
ETHYLBENZENE	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
XYLENES	3200	100	1	350	6	0.01	1	1E-06	15	25550	2190
CADMIUM	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190
CHROMIUM	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190
LEAD	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190
ZINC	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190
ARSENIC	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190
COPPER	3200	100	1	350	6	0.001	1	1E-06	15	25550	2190

Roosev , Puerto Rico
CTC 7-54-SRN
Date: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Residential Children

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	7.30		0.19	0
BENZO(a)ANTHRACENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.73		1.89	0
BENZO(b)FLUORANTHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.73		1.89	0
BENZO(k)FLUORANTHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.73		1.89	0
CHRYSENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.073		18.94	0
DIBENZ(ah)ANTHRACENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	7.30		0.19	0
INDENO(123-cd)PYRENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.73		1.89	0
NAPHTHALENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.004	0.00	474
ACENAPHTHYLENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00			0.00	0
ACENAPHTHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.060	0.00	7110
FLUORENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.040	0.00	4740
PHENANTHRENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00			0.00	0
ANTHRACENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.300	0.00	35552
FLUORANTHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.040	0.00	4740
PYRENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.030	0.00	3555
BENZO(ghi)PERYLENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00			0.00	0
PENTACHLOROPHENOL	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.800	0.030	1.73	3555
Aldrin	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	17	0.03	0.08	3555
alpha-BHC	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	6.3	0	0.22	0
beta-BHC	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	1.8	0	0.77	0
delta-BHC	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0	0	0.00	0
gamma-BHC	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	1.3	0.0003	1.06	36
4,4'-DDT	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.34	0.0005	4.07	59
4,4'-DDE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.34	0.0005	4.07	59
alpha-Chlordane	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	1.3		1.06	0
gamma-Chlordane	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	1.3		1.06	0
Endosulfan	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.0005	0.00	59
Dieldrin	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	16		0.09	0
PCBs	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	7.7		0.18	0
TETRACHLOROETHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.01	0.00	1185
TRICHLOROETHENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00			0.00	0
1,1,1-TRICHLOROETHANE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.006	0.00	711
BENZENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00	0.029		47.68	0
TOLUENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.200	0.00	23701
ETHYLBENZENE	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		0.100	0.00	11851
XYLENES	1.75E-07	5.48E-07	2.05E-06	6.39E-06	1.00E-06	1.00		2.000	0.00	237013
CADMIUM	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00		0.0005	0.00	76
CHROMIUM	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00		0.005	0.00	758
LEAD	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00			0.00	0
ZINC	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00		0.300	0.00	45473
ARSENIC	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00	1.75	0.0003	1.01	45
COPPER	1.75E-08	5.48E-07	2.05E-07	6.39E-06	1.00E-06	1.00		0.0370	0.00	5608

Rooseve[illegible] Puerto Rico
CTO [illegible]54-SRN
DATE: May 8, 1993

CALCULATION OF SOIL ACTION LEVELS - Future Residential Adults

PURPOSE: CALCULATE ACTION LEVELS PROTECTIVE OF HUMAN HEALTH SUBSEQUENT TO EXPOSURE.
DERMAL CONTACT AND ACCIDENTAL INGESTION SCENARIOS WILL BE ASSESSED REPRESENTING AN ADULT.

PERTINENT EQUATIONS: CARCINOGENIC CONTAMINANT ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (70yrs * 365) (d)

TOTAL RISK = (DERMAL DOSE + ACCIDENTAL ING. DOSE)*CPF

WHERE: CPF = THE CARCINOGENIC POTENCY FACTOR (Kg*d/mg)
DERMAL DOSE = C*K1
ACCIDENTAL ING. DOSE = C*K2

ACTION LEVEL (C) = TOTAL RISK/(K1 + K2)(CPF)

WHERE: TOTAL RISK = 1E-6

NONCARCINOGENIC ACTION LEVELS

DERMAL DOSE = (C)(SA)(AD)(EF)(ED)(AF)(CF)/(BW)(AT)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
SA = EXPOSED SKIN SURFACE AREA (cm)
AD = THE SOIL ADHERENCE FACTOR (mg/cm^2*d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

ACCIDENTAL INGESTION DOSE = (C)(AI)(D)(YRS)(AF)(CF)/(BW)(LF)

WHERE: C = THE CONTAMINANT CONCENTRATION (mg/Kg)
AI = THE AMOUNT INGESTED (g/d)
EF = THE EXPOSURE FREQUENCY (d/yr)
ED = THE EXPOSURE DURATION (yrs)
AF = THE ABSORBED FRACTION OF THE CONTAMINANT
CF = THE CONVERSION FACTOR (Kg/mg)
BW = AVERAGE BODY WEIGHT OF THE RECEPTOR (Kg)
AT = AVERAGING TIME (ED * 365) (d)

HAZARD = (DERMAL DOSE + ACCIDENTAL ING. DOSE)/RfD

WHERE: RfD = THE REFERENCE DOSE (mg/Kg*d)
DERMAL DOSE = C*K3
ACCIDENTAL ING. DOSE = C*K4

ACTION LEVEL (C) = HAZARD*RfD/(K3 + K4)

WHERE: HAZARD = 1.0

Roosev[illegible] Puerto Rico
CT[illegible]-54-SRN
DATE: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Residential Adults

CONTAMINANT	SA (cm^2)	AI (mg/D)	AD (mg/cm^2*d)	EF (d/yr)	ED (yr)	AF SKIN	AF GUT	CF (Kg/mg)	BW (Kg)	AT (CARC) (d)	AT (NON) (d)
BENZO(a)PYRENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
BENZO(a)ANTHRACENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
BENZO(b)FLUORANTHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
BENZO(k)FLUORANTHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
CHRYSENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
DIBENZ(ah)ANTHRACENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
INDENO(123-cd)PYRENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
NAPHTHALENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHYLENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
ACENAPHTHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
FLUORENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
PHENANTHRENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
ANTHRACENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
FLUORANTHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
PYRENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
BENZO(ghi)PERYLENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
PENTACHLOROPHENOL	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
Aldrin	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
alpha-BHC	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
beta-BHC	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
delta-BHC	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
gamma-BHC	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
4,4'-DDT	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
4,4'-DDE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
alpha-Chlordane	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
gamma-Chlordane	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
Endosulfan	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
Dieldrin	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
PCBs	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
TETRACHLOROETHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
TRICHLOROETHENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
1,1,1-TRICHLOROETHANE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
BENZENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
TOLUENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
ETHYLBENZENE	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
XYLENES	5300	50	1	350	30	0.01	1	1E-06	70	25550	10950
CADMIUM	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950
CHROMIUM	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950
LEAD	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950
ZINC	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950
ARSENIC	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950
COPPER	5300	50	1	350	30	0.001	1	1E-06	70	25550	10950

Roose[illegible]s, Puerto Rico
C[illegible] [illegible]7-54-SRN
DA[illegible]: May 8, 1993
CALCULATION OF SOIL ACTION LEVELS - Future Residential Adults

CONTAMINANT	K1	K2	K3	K4	ICR	HAZARD	CPF (Kg*d/mg)	RfD (mg/Kg*d)	CARC. ACTION LEVEL(ppm)	NONCARC. ACTION LEVEL(ppm)
BENZO(a)PYRENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	7.30		0.23	0
BENZO(a)ANTHRACENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.73		2.27	0
BENZO(b)FLUORANTHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.73		2.27	0
BENZO(k)FLUORANTHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.73		2.27	0
CHRYSENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.073		22.65	0
DIBENZ(ah)ANTHRACENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	7.30		0.23	0
INDENO(123-cd)PYRENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.73		2.27	0
NAPHTHALENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.004	0.00	2835
ACENAPHTHYLENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00			0.00	0
ACENAPHTHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.060	0.00	42524
FLUORENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.040	0.00	28350
PHENANTHRENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00			0.00	0
ANTHRACENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.300	0.00	212621
FLUORANTHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.040	0.00	28350
PYRENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.030	0.00	21262
BENZO(ghi)PERYLENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00			0.00	0
PENTACHLOROPHENOL	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.800	0.030	2.07	21262
Aldrin	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	17	0.03	0.10	21262
alpha-BHC	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	6.3	0	0.26	0
beta-BHC	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	1.8	0	0.92	0
delta-BHC	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0	0	0.00	0
gamma-BHC	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	1.3	0.0003	1.27	213
4,4'-DDT	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.34	0.0005	4.86	354
4,4'-DDE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.34	0.0005	4.86	354
alpha-Chlordane	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	1.3		1.27	0
gamma-Chlordane	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	1.3		1.27	0
Endosulfan	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.0005	0.00	354
Dieldrin	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	16		0.10	0
PCBs	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	7.7		0.21	0
TETRACHLOROETHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.01	0.00	7087
TRICHLOROETHENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00			0.00	0
1,1,1-TRICHLOROETHANE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.006	0.00	4252
BENZENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00	0.029		57.02	0
TOLUENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.200	0.00	141748
ETHYLBENZENE	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		0.100	0.00	70874
XYLENES	3.11E-07	2.94E-07	7.26E-07	6.85E-07	1.00E-06	1.00		2.000	0.00	1417476
CADMIUM	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00		0.0005	0.00	660
CHROMIUM	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00		0.005	0.00	6600
LEAD	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00			0.00	0
ZINC	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00		0.300	0.00	396022
ARSENIC	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00	1.75	0.0003	1.76	396
COPPER	3.11E-08	2.94E-07	7.26E-08	6.85E-07	1.00E-06	1.00		0.0370	0.00	48843

APPENDIX B
ADDITIONAL ANALYTICAL RESULTS
SUPPLEMENTAL INVESTIGATION

1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	alpha-BHC	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	alpha-BHC	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	beta-BHC	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	delta-BHC	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	gamma-BHC	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	heptachlor	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	aldrin	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	heptachlor epoxide	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan I	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	dieldrin	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDE	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endrin	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan II	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDD	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan sulfate	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDT	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	methoxychlor	0.065	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endrin ketone	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	endrin aldehyde	0.013	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	alpha-chlordane	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	gamma-chlordane	0.007	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	toxaphene	0.65	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	aroclor-1016	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1221	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1232	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1242	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1248	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1254	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1260	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	alpha-BHC	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	beta-BHC	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	delta-BHC	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	gamma-BHC	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	heptachlor	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	aldrin	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	heptachlor epoxide	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endosulfan I	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	dieldrin	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	4,4'-DDE	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endrin	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endosulfan II	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	4,4'-DDD	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endosulfan sulfate	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	4,4'-DDT	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	methoxychlor	1.3	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endrin ketone	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	endrin aldehyde	0.26	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	alpha-chlordane	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	gamma-chlordane	0.13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	toxaphene	13	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	aroclor-1016	2.6	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1221	5.2	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1232	2.6	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1242	2.6	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1248	2.6	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1254	2.6	U
1W114	07 GW 101	WATER	11/18/92	N/A	2.6042	ug/L	arochlor-1260	2.6	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	alpha-BHC	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	beta-BHC	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	delta-BHC	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	gamma-BHC	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	heptachlor	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	aldrin	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	heptachlor epoxide	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan I	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	dieldrin	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDE	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endrin	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan II	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDD	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan sulfate	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDT	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	methoxychlor	0.064	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endrin ketone	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	endrin aldehyde	0.013	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	alpha-chlordane	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	gamma-chlordane	0.006	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	toxaphene	0.64	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	aroclor-1016	0.13	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1221	0.26	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1232	0.13	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1242	0.13	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1248	0.13	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1254	0.13	U
1W114	07 GW 102	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1260	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	alpha-BHC	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	beta-BHC	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	delta-BHC	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	gamma-BHC	0.006	U

1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	heptachlor	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	aldrin	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	heptachlor epoxide	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endosulfan I	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	dieldrin	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	4,4'-DDE	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endrin	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endosulfan II	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	4,4'-DDD	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endosulfan sulfate	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	4,4'-DDT	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	methoxychlor	0.063	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endrin ketone	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	endrin aldehyde	0.013	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	alpha-chlordane	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	gamma-chlordane	0.006	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	toxaphene	0.63	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	aroclor-1016	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1221	0.25	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1232	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1242	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1248	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1254	0.13	U
1W114	07 GW 104	WATER	11/18/92	N/A	0.125	ug/L	arochlor-1260	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	alpha-BHC	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	beta-BHC	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	delta-BHC	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	gamma-BHC	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	heptachlor	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	aldrin	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	heptachlor epoxide	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan I	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	dieldrin	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDE	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endrin	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan II	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDD	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endosulfan sulfate	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	4,4'-DDT	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	methoxychlor	0.064	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endrin ketone	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	endrin aldehyde	0.013	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	alpha-chlordane	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	gamma-chlordane	0.006	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	toxaphene	0.64	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	aroclor-1016	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1221	0.26	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1232	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1242	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1248	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1254	0.13	U
1W114	07 GW 105	WATER	11/18/92	N/A	0.1289	ug/L	arochlor-1260	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	alpha-BHC	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	beta-BHC	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	delta-BHC	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	gamma-BHC	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	heptachlor	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	aldrin	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	heptachlor epoxide	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan I	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	dieldrin	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDE	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endrin	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan II	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDD	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endosulfan sulfate	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	4,4'-DDT	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	methoxychlor	0.065	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endrin ketone	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	endrin aldehyde	0.013	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	alpha-chlordane	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	gamma-chlordane	0.007	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	toxaphene	0.65	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	aroclor-1016	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1221	0.26	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1232	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1242	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1248	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1254	0.13	U
1W114	07 GW 107	WATER	11/18/92	N/A	0.1302	ug/L	arochlor-1260	0.13	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	alpha-BHC	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	beta-BHC	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	delta-BHC	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	gamma-BHC	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	heptachlor	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	aldrin	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	heptachlor epoxide	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endosulfan I	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	dieldrin	0.014	U

1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	4,4'-DDE	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endrin	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endosulfan II	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	4,4'-DDD	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endosulfan sulfate	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	4,4'-DDT	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	methoxychlor	0.069	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endrin ketone	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	endrin aldehyde	0.014	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	alpha-chlordane	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	gamma-chlordane	0.007	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	toxaphene	0.69	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	aroclor-1016	0.14	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1221	0.28	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1232	0.14	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1242	0.14	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1248	0.14	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1254	0.14	U
1W114	07 GW 108	WATER	11/18/92	N/A	0.1389	ug/L	arochlor-1260	0.14	U

1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	alpha-BHC	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	beta-BHC	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	delta-BHC	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	gamma-BHC	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	heptachlor	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	aldrin	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	heptachlor epoxide	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endosulfan I	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	dieldrin	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDE	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endrin	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endosulfan II	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	4.4'-DDD	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	methoxychlor	0.063	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endrin ketone	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	alpha-chlordane	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	gamma-chlordane	0.006	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	toxaphene	0.63	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	aroclor-1016	0.13	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1221	0.25	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1232	0.13	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1242	0.13	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1248	0.13	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1254	0.13	U
1W114	16 SW 183	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1260	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	alpha-BHC	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	beta-BHC	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	delta-BHC	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	gamma-BHC	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	heptachlor	0.01	
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	aldrin	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	heptachlor epoxide	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endosulfan I	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	dieldrin	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDE	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endrin	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endosulfan II	0.018	
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	4.4'-DDD	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	methoxychlor	0.063	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endrin ketone	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	alpha-chlordane	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	gamma-chlordane	0.006	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	toxaphene	0.63	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	aroclor-1016	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1221	0.25	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1232	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1242	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1248	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1254	0.13	U
1W114	16 SW 184	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1260	0.13	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	alpha-BHC	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	beta-BHC	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	delta-BHC	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	gamma-BHC	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	heptachlor	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	aldrin	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	heptachlor epoxide	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endosulfan I	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	dieldrin	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	4,4'-DDE	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endrin	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endosulfan II	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	4.4'-DDD	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endosulfan sulfate	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	4,4'-DDT	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	methoxychlor	0.069	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endrin ketone	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	endrin aldehyde	0.014	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	alpha-chlordane	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	gamma-chlordane	0.007	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	toxaphene	0.69	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	aroclor-1016	0.14	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1221	0.28	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1232	0.14	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1242	0.14	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1248	0.14	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1254	0.14	U
1W114	16 SW 186	WATER	11/20/92	N/A	0.1389	ug/L	arochlor-1260	1.9	P
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	alpha-BHC	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	beta-BHC	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	delta-BHC	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	gamma-BHC	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	heptachlor	0.007	U

1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	aldrin	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	heptachlor epoxide	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endosulfan I	0.007	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	deildrin	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	4,4'-DDE	0.075	
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endrin	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endosulfan II	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	4,4'-DDD	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	methoxychlor	0.065	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endrin ketone	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	alpha-chlordane	0.01	
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	gamma-chlordane	0.033	
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	toxaphene	0.65	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	aroclor-1016	0.13	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1221	0.26	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1232	0.13	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1242	0.13	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1248	0.13	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1254	0.13	U
1W114	16 SW 187	WATER	11/20/92	N/A	0.1302	ug/L	arochlor-1260	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	alpha-BHC	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	beta-BHC	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	delta-BHC	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	gamma-BHC	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	heptachlor	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	aldrin	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	heptachlor epoxide	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endosulfan I	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	deildrin	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	4,4'-DDE	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endrin	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endosulfan II	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	4,4'-DDD	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endosulfan sulfate	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	4,4'-DDT	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	methoxychlor	0.651	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endrin ketone	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	endrin aldehyde	0.13	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	alpha-chlordane	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	gamma-chlordane	0.065	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	toxaphene	6.51	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	aroclor-1016	1.3	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1221	2.6	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1232	1.3	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1242	1.3	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1248	1.3	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1254	1.3	U
1W114	16 SW 187D	WATER	11/20/92	N/A	1.302	ug/L	arochlor-1260	18	P
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	alpha-BHC	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	beta-BHC	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	delta-BHC	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	gamma-BHC	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	heptachlor	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	aldrin	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	heptachlor epoxide	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endosulfan I	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	deildrin	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDE	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endrin	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endosulfan II	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDD	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	methoxychlor	0.063	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endrin ketone	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	alpha-chlordane	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	gamma-chlordane	0.006	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	toxaphene	0.63	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	aroclor-1016	0.13	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1221	0.25	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1232	0.13	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1242	0.13	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1248	0.13	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1254	0.13	U
1W114	16 SW 188	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1260	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	alpha-BHC	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	beta-BHC	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	delta-BHC	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	gamma-BHC	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	heptachlor	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	aldrin	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	heptachlor epoxide	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endosulfan I	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	deildrin	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDE	0.013	U

1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endrin	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endosulfan II	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDD	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	methoxychlor	0.063	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endrin ketone	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	alpha-chlordane	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	gamma-chlordane	0.006	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	toxaphene	0.63	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	aroclor-1016	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1221	0.25	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1232	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1242	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1248	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1254	0.13	U
1W114	16 SW 191	WATER	11/20/92	N/A	0.125	ug/L	arochlor-1260	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	alpha-BHC	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	beta-BHC	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	delta-BHC	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	gamma-BHC	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	heptachlor	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	aldrin	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	heptachlor epoxide	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endosulfan I	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	deildrin	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	4,4'-DDE	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endrin	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endosulfan II	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	4,4'-DDD	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endosulfan sulfate	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	4,4'-DDT	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	methoxychlor	0.066	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endrin ketone	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	endrin aldehyde	0.013	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	alpha-chlordane	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	gamma-chlordane	0.007	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	toxaphene	0.66	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	aroclor-1016	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1221	0.26	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1232	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1242	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1248	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1254	0.13	U
1W114	16 SW 192	WATER	11/20/92	N/A	0.1316	ug/L	arochlor-1260	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	alpha-BHC	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	beta-BHC	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	delta-BHC	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	gamma-BHC	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	heptachlor	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	aldrin	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	heptachlor epoxide	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endosulfan I	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	deildrin	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDE	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endrin	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endosulfan II	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDD	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endosulfan sulfate	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDT	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	methoxychlor	0.064	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endrin ketone	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	endrin aldehyde	0.013	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	alpha-chlordane	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	gamma-chlordane	0.006	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	toxaphene	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	aroclor-1016	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1221	0.26	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1232	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1242	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1248	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1254	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1260	0.13	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	alpha-BHC	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	beta-BHC	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	delta-BHC	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	gamma-BHC	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	heptachlor	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	aldrin	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	heptachlor epoxide	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	endosulfan I	0.32	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	deildrin	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDE	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	endrin	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	endosulfan II	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDD	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	endosulfan sulfate	0.64	U
1W114	R07 GW 103	WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDT	0.64	U

1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	methoxychlor	3.2	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	endrin ketone	0.64	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	endrin aldehyde	0.64	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	alpha-chlordane	0.32	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	gamma-chlordane	0.32	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	toxaphene	32	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	aroclor-1016	6.4	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1221	13	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1232	6.4	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1242	6.4	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1248	6.4	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1254	6.4	U
1W114	R07 GW 103 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1260	6.4	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	alpha-BHC	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	beta-BHC	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	delta-BHC	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	gamma-BHC	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	aldrin	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor epoxide	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan I	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	deildrin	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDE	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endrin	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan II	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	4.4'-DDD	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan sulfate	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDT	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	methoxychlor	0.064	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endrin ketone	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	endrin aldehyde	0.013	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	alpha-chlordane	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	gamma-chlordane	0.006	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	toxaphene	0.64	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	aroclor-1016	0.13	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1221	0.26	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1232	0.13	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1242	0.13	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1248	0.13	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1254	0.13	U
1W114	R07 GW 106 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1260	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	alpha-BHC	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	beta-BHC	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	delta-BHC	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	gamma-BHC	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	aldrin	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor epoxide	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan I	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	deildrin	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDE	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endrin	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan II	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	4.4'-DDD	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan sulfate	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDT	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	methoxychlor	0.064	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endrin ketone	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	endrin aldehyde	0.013	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	alpha-chlordane	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	gamma-chlordane	0.006	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	toxaphene	0.64	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	aroclor-1016	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1221	0.26	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1232	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1242	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1248	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1254	0.13	U
1W114	R07 GW 109 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1260	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	alpha-BHC	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	beta-BHC	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	delta-BHC	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	gamma-BHC	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	aldrin	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	heptachlor epoxide	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan I	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	deildrin	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDE	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endrin	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan II	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	4.4'-DDD	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endosulfan sulfate	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	4,4'-DDT	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	methoxychlor	0.064	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endrin ketone	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	endrin aldehyde	0.013	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	alpha-chlordane	0.006	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	gamma-chlordane	0.006	U

1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	toxaphene	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	aroclor-1016	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1221	0.26	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1232	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1242	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1248	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1254	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	0.1276	ug/L	arochlor-1260	0.13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	alpha-BHC	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	beta-BHC	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	delta-BHC	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	gamma-BHC	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	heptachlor	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	aldrin	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	heptachlor epoxide	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endosulfan I	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	deildrin	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDE	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endrin	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endosulfan II	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDD	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endosulfan sulfate	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	4,4'-DDT	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	methoxychlor	3.2	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endrin ketone	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	endrin aldehyde	0.64	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	alpha-chlordane	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	gamma-chlordane	0.32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	toxaphene	32	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	aroclor-1016	6.4	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1221	13	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1232	6.4	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1242	6.4	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1248	6.4	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1254	6.4	U
1W114	R07 GW 110 WATER	11/24/92	N/A	6.3776	ug/L	arochlor-1260	6.4	U

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL. FACTOR	UNIT	PARAMETER	CONC.	QUAL.	VAL. CONC.	QUAL.
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	phenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-chlorophenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	isophorone	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	acenaphthene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-nitrophenol	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	fluorene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	pentachlorophenol	51	U	51	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	anthracene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	carbazole	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	pyrene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	chrysene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	16	JB	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0116	R07GW103	WATER	11/24/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	phenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-chlorophenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-methylphenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-methylphenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	hexachloroethane	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	nitrobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	isophorone	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-nitrophenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U		R

0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	naphthalene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-chloroaniline	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	hexachlorobutadiene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-methylnaphthalene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-chloronaphthalene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2-nitroaniline	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	dimethylphthalte	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	acenaphthylene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	3-nitroaniline	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	acenaphthene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-nitrophenol	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	dibenzofuran	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	diethylphthalate	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	fluorene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-nitroaniline	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	hexachlorobenzene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	pentachlorophenol	51	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	phenanthrene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	anthracene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	carbazole	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	di-n-butylphthalate	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	fluoranthene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	pyrene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	benzo(a)anthracene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	chrysene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	18	JB		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	di-n-octylphthalate	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	benzo(a)pyrene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U		R
0116	R07GW106	WATER	11/24/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U		R
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	phenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-chlorophenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	isophorone	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	acenaphthene	20	U	20	U

0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-nitrophenol	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	fluorene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	pentachlorophenol	51	U	51	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	anthracene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	carbazole	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	pyrene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	chrysene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	16	JB	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0116	R07GW109	WATER	11/24/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	phenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-chlorophenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	isophorone	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	acenaphthene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-nitrophenol	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	fluorene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	pentachlorophenol	51	U	51	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	anthracene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	carbazole	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U

0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	pyrene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	chrysene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	26	B	26	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0116	R07GW110	WATER	11/24/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U

0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	phenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-chlorophenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-methylphenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-methylphenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	hexachloroethane	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	nitrobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	isophorone	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-nitrophenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	naphthalene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-chloroaniline	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2-nitroaniline	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	dimethylphthalte	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	acenaphthylene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	3-nitroaniline	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	acenaphthene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-nitrophenol	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	dibenzofuran	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	diethylphthalate	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	fluorene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-nitroaniline	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	pentachlorophenol	51	U	51 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	phenanthrene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	anthracene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	carbazole	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	fluoranthene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	pyrene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	chrysene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	15	JB	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20 U
0116	R16SW183	WATER	11/30/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20 U

0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	phenol		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-chlorophenol		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	1,4-dichlorobenzene		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	isophorone	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	1,2,4-trichlorobenzene		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-chloro-3-methylphenol		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	acenaphthene		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-nitrophenol		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrotoluene		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	fluorene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	pentachlorophenol		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	anthracene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	carbazole	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	pyrene		MS		MS
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	chrysene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	16	JB	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0116	R07GW198	WATER	12/01/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	phenol		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-chlorophenol		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	1,4-dichlorobenzene		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	isophorone	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U

0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	1,2,4-trichlorobenzene		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-chloro-3-methylphenol		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	acenaphthene		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-nitrophenol		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	2,4-dinitrotoluene		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	fluorene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	pentachlorophenol		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	anthracene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	carbazole	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	pyrene		MS		MS
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	chrysene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	14	JB	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0116	R07GW199	WATER	12/01/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL. FACTOR	UNIT	PARAMETER	CONC.	QUAL.	VAL. CONC.	QUAL.	REF #
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	aluminum	4700	N*	4700	J	2,4
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	arsenic	7.8	B	7.8	B	
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	barium	294		294		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cadmium	3.9	B	3.9	B	
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	calcium	136000		136000		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	9
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cobalt	177		177		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	copper	37.4		37.4		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	iron	32000	*	32000	J	4
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	lead	9	UW	9	UJ	7
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	magnesium	266000		266000		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	manganese	775	E	775	J	6
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	nickel	42.4		42.4		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	potassium	94200	E	94200	J	6
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	selenium	12	UNW	12	UJ	2,7
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	sodium	2810000	E	2810000	J	6
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,7
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	vanadium	65.9		65.9		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	zinc	40.1		40.1		
B1012A	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ	5
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	aluminum	101	BN*	101	UJ	1,2,4
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	barium	40.6	B	40.6	B	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	calcium	111000		111000		
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	9
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	copper	5.1	U	5.1	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	iron	691	*	691	J	4
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	lead	9	U	9	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	magnesium	186000		186000		
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	manganese	395	E	395	J	6
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	potassium	106000	E	106000	J	6
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	selenium	12	UN	12	UJ	2
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	sodium	195000	E	195000	J	6
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,7
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U	
B1012A	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ	5
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	aluminum	3390	N*	3390	J	2,4
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	arsenic	15	U	15	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	barium	98.4	B	98.4	B	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	calcium	358000		358000		
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	9
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	copper	30.6		30.6		
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	iron	9620	*	9620	J	4
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	lead	9	UW	9	UJ	7
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	magnesium	1300000		1300000		
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	manganese	2160	E	2160	J	6
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	potassium	408000	E	408000	J	6
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	selenium	12	UN	12	UJ	2
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	sodium	14800000	E	14800000	J	6
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,7
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U	
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	zinc	125		125		
B1012A	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ	5
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	aluminum	416	N*	416	J	2,4
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	barium	35.2	U	35.2	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	calcium	312000		312000		
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	9
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	copper	5.2	B	5.2	B	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	iron	4810	*	4810	J	4
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	lead	9	UW	9	UJ	7
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	magnesium	454000		454000		
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	manganese	78	E	78	J	6
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	

B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	potassium	1420000	E	1420000	J		6
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	selenium	12	UNW	12	UJ	2,7	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	sodium	20100000	E	20100000	J		6
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,7	
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012A	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ		5
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	aluminum	2030	N*	2030	J	2,4	
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	barium	52.9	B	52.9	B		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cadmium	2.6	U	2.6	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	calcium	138000		138000			
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		9
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	copper	31.6		31.6			
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	iron	3670	*	3670	J		4
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	lead	2.7	BW	2.7	J		8
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	magnesium	120000		120000			
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	manganese	323	E	323	J		6
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	potassium	34600	E	34600	J		6
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	selenium	2.4	UN	2.4	UJ		2
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	sodium	806000	E	806000	J		6
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,7	
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	zinc	18.2	B	18.2	B		
B1012A	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ		5
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	aluminum	2690	N*	2690	J	2,4	
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	arsenic	3	UW	3	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	barium	35.2	U	35.2	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cadmium	2.6	U	2.6	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	calcium	139000		139000			
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		9
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	copper	13	B	13	B		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	iron	7150	*	7150	J		4
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	lead	2.7	BW	2.7	J		7
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	magnesium	67400		67400			
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	manganese	102	E	102	J		6
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	potassium	10400	E	10400	J		6
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	selenium	2.5	BN	2.5	J		2
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	sodium	222000	E	222000	J		6
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,7	
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	vanadium	18	B	18	B		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	zinc	16.7	B	16.7	B		
B1012A	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ		5
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	aluminum	2210	N*	2210	J	2,4	
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	arsenic	30.6	S	30.6			
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	barium	60.2	B	60.2	B		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	calcium	472000		472000			
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		9
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	copper	17.1	B	17.1	B		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	iron	6650	*	6650	J		4
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	lead	9	UW	9	UJ		7
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	magnesium	1360000		1360000			
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	manganese	80.9	E	80.9	J		6
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	potassium	405000	E	405000	J		6
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	selenium	12	UN	12	UJ		2
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	sodium	12500000	E	12500000	J		6
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UN	7.5	UJ		2
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012A	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10	UJ		5
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	aluminum	3190	N*	3190	J	2,4	
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	arsenic	3	US	3	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	barium	53.2	B	53.2	B		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	calcium	149000		149000			
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		9
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		

B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	copper	26.2		26.2			
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	iron	4910	*	4910	J		4
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	lead	2.2	BW	2.2	J		8
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	magnesium	125000		125000			
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	manganese	283	E	283	J		6
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	potassium	33100	E	33100	J		6
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	selenium	2.4	UNW	2.4	UJ	2,7	
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	sodium	819000	E	819000	J		6
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,7	
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	zinc	16	B	16	B		
B1012A	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL. FACTOR	UNIT	PARAMETER	CONC.	QUAL.	VAL. CONC.	QUAL.	REF #
0110	07GW101	WATER	11/18/92	NA	2	ug/L	phenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-chlorophenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-methylphenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-methylphenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	hexachloroethane	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	nitrobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	isophorone	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-nitrophenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	naphthalene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-chloroaniline	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2-nitroaniline	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	dimethylphthalte	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	acenaphthylene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	3-nitroaniline	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	acenaphthene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-nitrophenol	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	dibenzofuran	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	diethylphthalate	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	fluorene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-nitroaniline	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	pentachlorophenol	50	U	50	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	phenanthrene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	anthracene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	carbazole	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	fluoranthene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	pyrene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	chrysene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	1	J	1	J	2
0110	07GW101	WATER	11/18/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U	
0110	07GW101	WATER	11/18/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	phenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-chlorophenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-methylphenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-methylphenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	hexachloroethane	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	nitrobenzene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	isophorone	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-nitrophenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	naphthalene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-chloroaniline	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U	
0110	07GW102	WATER	11/18/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U	

0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2-nitroaniline	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	dimethylphthalte	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	acenaphthylene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	3-nitroaniline	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	acenaphthene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-nitrophenol	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	dibenzofuran	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	diethylphthalate	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	fluorene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-nitroaniline	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	pentachlorophenol	50	U	50	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	phenanthrene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	anthracene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	carbazole	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	fluoranthene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	pyrene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	chrysene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0110	07GW102	WATER	11/18/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	phenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-chlorophenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-methylphenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-methylphenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	hexachloroethane	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	nitrobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	isophorone	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-nitrophenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	naphthalene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-chloroaniline	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2-nitroaniline	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	dimethylphthalte	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	acenaphthylene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	3-nitroaniline	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	acenaphthene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-nitrophenol	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	dibenzofuran	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	diethylphthalate	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	fluorene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-nitroaniline	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	pentachlorophenol	50	U	50	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	phenanthrene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	anthracene	20	U	20	U
0110	07GW104	WATER	11/18/92	NA	2	ug/L	carbazole	20	U	20	U

0110	07GW104	WATER	11/18/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	fluoranthene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	pyrene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	chrysene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	5	J	5	J	2
0110	07GW104	WATER	11/18/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U	
0110	07GW104	WATER	11/18/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	phenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-chlorophenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-methylphenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-methylphenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	hexachloroethane	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	nitrobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	isophorone	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-nitrophenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	naphthalene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-chloroaniline	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2-nitroaniline	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	dimethylphthalte	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	acenaphthylene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	3-nitroaniline	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	acenaphthene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-nitrophenol	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	dibenzofuran	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	diethylphthalate	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	fluorene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-nitroaniline	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	pentachlorophenol	50	U	50	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	phenanthrene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	anthracene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	carbazole	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	fluoranthene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	pyrene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	chrysene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	6	J	6	J	2
0110	07GW105	WATER	11/18/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U	
0110	07GW105	WATER	11/18/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	phenol	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethyl)ether	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-chlorophenol	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	1,3-dichlorobenzene	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	1,4-dichlorobenzene	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	1,2-dichlorobenzene	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-methylphenol	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-methylphenol	21	U	21	U	
0110	07GW107	WATER	11/18/92	NA	2	ug/L	n-nitrosodi-n-propylamine	21	U	21	U	

0110	07GW107	WATER	11/18/92	NA	2	ug/L	hexachloroethane	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	nitrobenzene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	isophorone	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-nitrophenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4-dimethylphenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	bis(2-chloroethoxy)methane	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4-dichlorophenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	1,2,4-trichlorobenzene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	naphthalene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-chloroaniline	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	hexachlorobutadiene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-chloro-3-methylphenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-methylnaphthalene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	hexachlorocyclopentadiene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4,6-trichlorophenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4,5-trichlorophenol	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-chloronaphthalene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2-nitroaniline	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	dimethylphthalte	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	acenaphthylene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	3-nitroaniline	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	acenaphthene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4-dinitrophenol	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-nitrophenol	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	dibenzofuran	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	2,4-dinitrotoluene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	diethylphthalate	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-chloropehnyl-phenylether	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	fluorene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-nitroaniline	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	n-nitrosodiphenylamine	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	4-bromophenyl-phenylether	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	hexachlorobenzene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	pentachlorophenol	51	U	51	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	phenanthrene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	anthracene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	carbazole	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	di-n-butylphthalate	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	fluoranthene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	pyrene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	butylbenzylphthaalte	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	3,3-dichlorobenzidine	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	benzo(a)anthracene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	chrysene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	2	J	2	J
0110	07GW107	WATER	11/18/92	NA	2	ug/L	di-n-octylphthalate	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	benzo(b)fluoranthene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	benzo(k)fluoranthene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	benzo(a)pyrene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	dibenzo(a,h)anthracene	21	U	21	U
0110	07GW107	WATER	11/18/92	NA	2	ug/L	benzo(g,h,i)perylene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	phenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	bis(2-chloroethyl)ether	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-chlorophenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	1,3-dichlorobenzene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	1,4-dichlorobenzene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	1,2-dichlorobenzene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-methylphenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	bis(2-chloroisopropyl)ether	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-methylphenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	n-nitrosodi-n-propylamine	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	hexachloroethane	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	nitrobenzene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	isophorone	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-nitrophenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4-dimethylphenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	bis(2-chloroethoxy)methane	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4-dichlorophenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	1,2,4-trichlorobenzene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	naphthalene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-chloroaniline	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	hexachlorobutadiene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-chloro-3-methylphenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-methylnaphthalene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	hexachlorocyclopentadiene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4,6-trichlorophenol	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4,5-trichlorophenol	53	U	53	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-chloronaphthalene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2-nitroaniline	53	U	53	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	dimethylphthalte	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	acenaphthylene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4-dinitrotoluene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	3-nitroaniline	53	U	53	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	acenaphthene	21	U	21	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4-dinitrophenol	53	U	53	U
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-nitrophenol	53	U	53	U

0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	dibenzofuran	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	2,4-dinitrotoluene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	diethylphthalate	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-chloropehnyl-phenylether	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	fluorene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-nitroaniline	53	U	53	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4,6-dinitro-2-methylphenol	53	U	53	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	n-nitrosodiphenylamine	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	4-bromophenyl-phenylether	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	hexachlorobenzene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	pentachlorophenol	53	U	53	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	phenanthrene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	anthracene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	carbazole	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	di-n-butylphthalate	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	fluoranthene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	pyrene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	butylbenzylphthaalte	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	3,3-dichlorobenzidine	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	benzo(a)anthracene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	chrysene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	bis(2-ethylhexyl)phthalate	5	J	5	J	2
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	di-n-octylphthalate	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	benzo(b)fluoranthene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	benzo(k)fluoranthene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	benzo(a)pyrene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	indeno(1,2,3-cd)pyrene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	dibenzo(a,h)anthracene	21	U	21	U	
0110	07GW108	WATER	11/18/92	NA	2.11	ug/L	benzo(g,h,i)perylene	21	U	21	U	

SDG #	SAMPLE ID	MATRIX	DATE COL	% MOISTU	DIL. FACT	UNIT	PARAMETER	CONC.	QUAL.	VAL. CON	QUAL.	REF #
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	methylene chlori	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	acetone	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U	
110	07 GW 101	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	methylene chlori	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	acetone	15		15	J	2
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U	
110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U	

110	07 GW 102	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	methylene chlori	3	J	3	J		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	acetone	22		22	J		2
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U		
110	07 GW 104	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	methylene chlori	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	acetone	13		13	J		2
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	3	J	3	J		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	7		7			
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U		
110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U		

110	07 GW 105	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	methylene chlori	3	J	3	J	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	acetone	22		22	J	2
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U	
110	07 GW 106	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	methylene chlori	3	J	3	J	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	acetone	19		19	J	2
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U	
110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U	

110	07 GW 107	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	chloromethane	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	bromomethane	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	vinylchloride	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	chloroethane	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	methylene chlori	3	J	3	J	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	acetone	22		22	J	2
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	carbon disulfide	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroethe	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,1-dichloroetha	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroethe	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	chloroform	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroetha	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	2-butanone	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,1,1-trichloroet	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	carbon tetrachlo	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	vinylacetate	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	bromodichlorom	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,2-dichloroprop	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	trans-1,3-dichlor	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	trichloroethene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	dibromochlorom	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,1,2-trichloroet	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	benzene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	cis-1,3-dichlorop	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	bromoform	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	4-methyl-2-pent	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	2-hexanone	10	U	10	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	tetrachloroethen	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	1,1,2,2-tetrachlo	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	toluene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	chlorobenzene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	ethylbenzene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	styrene	5	U	5	U	
110	07 GW 108	WATER	11/18/92	N/A	1	ug/L	xylenes(total)	5	U	5	U	

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL. FACTOR	UNIT	PARAMETER	CONC.	QUAL.	VAL. CONC.	QUAL.	REF #
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	aluminum	104	B	104	U	1
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	barium	119	B	119	B	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	calcium	105000		105000		
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	7
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	copper	8	B	8	B	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	iron	119		119		
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	lead	9	UNW	9	UJ	5
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	magnesium	270000		270000		
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	manganese	215		215		
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	potassium	88700	E	88700	J	4
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	selenium	24	U	24	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	sodium	2630000	E	2630000	J	4
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,5
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	vanadium	52.1		52.1		
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U	
B1012B	07-GW-101	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA		
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	aluminum	82.5	B	82.5	U	1
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	antimony	256		256		
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	barium	39	B	39	B	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	calcium	137000		137000		
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	7
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	copper	5.1	U	5.1	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	iron	85	B	85	B	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	lead	9	UNW	9	UJ	5
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	magnesium	338000		338000		
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	manganese	246		246		
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	potassium	156000	BE	156000	J	4
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	selenium	24	UW	24	UJ	5
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	sodium	3340000	E	3340000	J	4
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UN	7.5	UJ	2
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U	
B1012B	07-GW-102	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA		
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	aluminum	98.2	B	98.2	U	1
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	arsenic	3	UW	3	UJ	5
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	barium	80.6	B	80.6	B	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	calcium	347000		347000		
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	7
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	copper	9.4	B	9.4	B	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	iron	305		305		
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	lead	9	UN	9	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	magnesium	1300000		1300000		
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	manganese	1950		1950		
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	potassium	405000	BE	405000	J	4
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	selenium	24	UW	24	UJ	5
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	sodium	15900000	E	15900000	J	4
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	thallium	15	UN	15	UJ	2
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U	
B1012B	07-GW-104	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	aluminum	93.2	B	93.2	U	1
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	barium	35.2	U	35.2	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	calcium	270000		270000		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ	7
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	copper	8.7	B	8.7	B	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	iron	740		740		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	lead	1.8	UNW	1.8	UJ	5
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	magnesium	442000		442000		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	manganese	60.5		60.5		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ	2
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U	

B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	potassium	159000	E	159000	J		4
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	selenium	24	UW	24	UJ		5
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	sodium	3130000	E	3130000	J		4
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	thallium	7.5	UNW	7.5	UJ	2,5	
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012B	07-GW-105	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	aluminum	101	B	101	U		1
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	barium	42.5	B	42.5	B		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	calcium	121000		121000			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	chromium	13.2		13.2			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	copper	5.9	B	5.9	B		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	iron	104		104			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	lead	1.8	UNW	1.8	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	magnesium	106000		106000			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	manganese	267		267			
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	potassium	30000	BE	30000	J		4
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	selenium	2.4	UW	2.4	UJ		5
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	sodium	722000	E	722000	J		4
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,5	
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012B	07-GW-106	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	aluminum	108	B	108	U		1
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	barium	35.2	U	35.2	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	calcium	89800		89800			
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		7
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	copper	5.1	U	5.1	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	iron	51.9	B	51.9	B		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	lead	1.8	UN	1.8	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	magnesium	61600		61600			
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	manganese	41.4		41.4			
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	potassium	9320	E	9320	J		4
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	selenium	2.4	U	2.4	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	sodium	194000	E	194000	J		4
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,5	
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012B	07-GW-107	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	aluminum	60.2	B	60.2	U		1
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	arsenic	3	UW	3	UJ		5
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	barium	62.4	B	62.4	B		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	calcium	345000		345000			
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		7
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	copper	5.1	U	5.1	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	iron	39.2	B	39.2	B		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	lead	1.8	UN	1.8	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	magnesium	1410000		1410000			
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	manganese	28.8		28.8			
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	potassium	369000	E	369000	J		4
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	selenium	24	UW	24	UJ		5
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	sodium	9900000	E	9900000	J		4
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	thallium	15	UN	15	UJ		2
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012B	07-GW-108	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	aluminum	129	B	129	U		1
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	antimony	47.2	U	47.2	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	barium	38.5	B	38.5	B		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	beryllium	0.6	U	0.6	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cadmium	2.8	U	2.8	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	calcium	134000		134000			
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	chromium	10.3	U	10.3	UJ		7
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cobalt	9.6	U	9.6	U		

B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	copper	10.7	B	10.7	B		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	iron	314		314			
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	lead	6.7	NW	6.7	J	3,6	
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	magnesium	113000		113000			
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	manganese	247		247			
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	mercury	0.2	UN	0.2	UJ		2
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	nickel	18.7	U	18.7	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	potassium	31400	E	31400	J		4
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	selenium	24	UW	24	UJ		5
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	silver	6.3	U	6.3	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	sodium	754000	E	754000	J		4
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	thallium	1.5	UNW	1.5	UJ	2,5	
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	vanadium	14.3	U	14.3	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	zinc	12.1	U	12.1	U		
B1012B	07-GW-198	WATER	11/18/92	N/A	1	ug/L	cyanide	NA		NA			

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL FACTOR	UNIT	PARAMETER	CONC.	QUAL	VAL CONC.	QUAL	REF #
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	aluminum					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	antimony					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	arsenic					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	barium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	beryllium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	cadmium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	calcium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	chromium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	cobalt					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	copper					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	iron					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	lead					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	magnesium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	manganese					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	mercury					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	nickel					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	potassium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	selenium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	silver					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	sodium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	thallium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	vanadium					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	zinc					
BAKE16	R07-GW-103	WATER	11/24/92	N/A	1	ug/L	cyanide	10	U	10	UJ	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	aluminum	49100		49100	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	arsenic	34.8		34.8	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	barium	178	B	178	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	beryllium	2.2	B	2.2	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	cadmium	6.2		6.2	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	calcium	1530000		1530000	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	chromium	91.8		91.8	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	cobalt	33.6	B	33.6	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	copper	296		296	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	iron	59300	E	59300	J	3,4,5
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	lead	1.8	UW	1.8	UJ	3,4,6
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	magnesium	1440000		1440000	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	manganese	1140		1140	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	nickel	36.8	B	36.8	J	2,3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	potassium	326000		326000	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	silver	6.3	B	6.3	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	sodium	10100000	E	10100000	J	3,4,5
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	thallium	7.5	UW	7.5	UJ	3,4,6
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	vanadium	172		172	J	2,3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	zinc	285		285	J	3,4
BAKE16	R07-GW-103A	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	aluminum	39.2	U	39.2	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	arsenic	7	B	7	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	barium	77	B	77	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	calcium	253000		253000	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	copper	10.9	B	10.9	J	2,3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	iron	16	BE	16	J	2,3,4,5
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	lead	18	UW	18	UJ	3,4,6
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	magnesium	1280000		1280000	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	manganese	155		155	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	potassium	374000		374000	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	sodium	10300000	E	10300000	J	3,4,5
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	thallium	7.5	UW	7.5	UJ	3,4,6
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	zinc	22.5		22.5	J	3,4
BAKE16	R07-GW-103B	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	aluminum					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	antimony					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	arsenic					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	barium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	beryllium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	cadmium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	calcium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	chromium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	cobalt					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	copper					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	iron					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	lead					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	magnesium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	manganese					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	mercury					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	nickel					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	potassium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	selenium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	silver					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	sodium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	thallium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	vanadium					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	zinc					
BAKE16	R07-GW-106	WATER	11/24/92	N/A	1	ug/L	cyanide	10	U	10	U	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	aluminum	498		498	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4

BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	barium	60.7	B	60.7	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	calcium	198000		198000	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	copper	9.9	B	9.9	J	2,3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	iron	1410	E	1410	J	3,4,5
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	lead	4.8	W	4.8	J	3,4,7
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	magnesium	249000		249000	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	manganese	518		518	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	potassium	93600		93600	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	sodium	2190000	E	2190000	J	3,4,5
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	thallium	1.5	UW	1.5	UJ	3,4,6
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	zinc	21.1		21.1	J	3,4
BAKE16	R07-GW-106A	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	aluminum	39.2	U	39.2	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	barium	57.7	B	57.7	J	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	calcium	183000		183000	J	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	copper	5.1	U	5.1	UJ	2,3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	iron	38	BE	38	J	2,3,4,5
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	lead	1.8	UW	1.8	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	magnesium	228000		228000	J	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	manganese	443		443	J	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	potassium	71900		71900	J	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	sodium	1560000	E	1560000	J	3,4,5
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	thallium	1.5	UW	1.5	UJ	3,4,6
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	zinc	12.1	U	12.1	UJ	3,4
BAKE16	R07-GW-106B	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	aluminum					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	antimony					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	arsenic					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	barium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	beryllium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	cadmium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	calcium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	chromium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	cobalt					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	copper					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	iron					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	lead					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	magnesium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	manganese					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	mercury					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	nickel					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	potassium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	selenium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	silver					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	sodium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	thallium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	vanadium					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	zinc					
BAKE16	R07-GW-109	WATER	11/24/92	N/A	1	ug/L	cyanide	10	U	10	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	aluminum	4820		4820	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	barium	70.1	B	70.1	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	calcium	195000		195000	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	copper	28.2		28.2	UJ	2,3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	iron	6730	E	6730	J	3,4,5
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	lead	3.1	W	3.1	J	3,4,7
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	magnesium	229000		229000	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	manganese	532		532	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	potassium	76500		76500	J	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	sodium	1600000	E	1600000	J	3,4,5
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	thallium	1.5	UW	1.5	UJ	3,4,6
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	zinc	23.2		23.2	UJ	3,4
BAKE16	R07-GW-109A	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	aluminum	39.2	U	39.2	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	barium	67.4	B	67.4	J	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	calcium	202000		202000	J	3,4

BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	copper	5.1	U	5.1	UJ	2,3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	iron	94.3	BE	94.3	J	2,3,4,5
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	lead	1.8	UW	1.8	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	magnesium	268000		268000	J	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	manganese	463		463	J	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	potassium	91700		91700	J	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	sodium	1880000	E	1880000	J	3,4,5
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	thallium	7.5	U	7.5	UJ	3,4,6
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	zinc	12.1	U	12.1	UJ	3,4
BAKE16	R07-GW-109B	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	aluminum					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	antimony					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	arsenic					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	barium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	beryllium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	cadmium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	calcium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	chromium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	cobalt					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	copper					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	iron					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	lead					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	magnesium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	manganese					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	mercury					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	nickel					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	potassium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	selenium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	silver					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	sodium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	thallium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	vanadium					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	zinc					
BAKE16	R07-GW-110	WATER	11/24/92	N/A	1	ug/L	cyanide	10	U	10	UJ	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	aluminum	35900		35900	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	arsenic	22.2	S	22.2	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	barium	163	B	163	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	beryllium	2	B	2	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	cadmium	3.6	B	3.6	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	calcium	1550000		1550000	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	chromium	67.8		67.8	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	copper	160		160	J	2,3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	iron	34500	E	34500	J	3,4,5
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	lead	100		100	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	magnesium	1390000		1390000	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	manganese	922		922	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	nickel	9.6	B	9.6	J	2,3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	potassium	298000		298000	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	silver	8.4	B	8.4	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	sodium	10600000	E	10600000	J	3,4,5
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	thallium	7.5	UW	7.5	UJ	3,4,6
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	vanadium	137		137	J	2,3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	zinc	237		237	J	3,4
BAKE16	R07-GW-110A	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	aluminum	62.9	B	62.9	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	arsenic	4.3	BW	4.3	J	3,4,6
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	barium	74.1	B	74.1	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	beryllium	0.8	U	0.8	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	calcium	300000		300000	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	copper	5.1	U	5.1	UJ	2,3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	iron	92.8	BE	92.8	J	3,4,5
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	lead	18	UW	18	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	magnesium	1320000		1320000	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	manganese	172		172	J	2,3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	mercury	0.2	U	0.2	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	potassium	440000		440000	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	sodium	10700000	E	10700000	J	3,4,5
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	thallium	7.5	UW	7.5	UJ	3,4,6
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	J	2,3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	zinc	18.2	B	18.2	J	3,4
BAKE16	R07-GW-110B	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	aluminum					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	antimony					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	arsenic					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	barium					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	beryllium					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	cadmium					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	calcium					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	chromium					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	cobalt					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	copper					
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	iron					

BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	lead						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	magnesium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	manganese						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	mercury						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	nickel						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	potassium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	selenium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	silver						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	sodium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	thallium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	vanadium						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	zinc						
BAKE16	R07-GW-101	WATER	11/24/92	N/A	1	ug/L	cyanide	10	U	10	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	aluminum	518		518	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4,6
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	barium	22.5	U	22.5	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	beryllium	1.1	B	1.1	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	calcium	238000		238000	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	copper	5.1	U	5.1	UJ	2,3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	iron	1020	E	1020	J	3,4,5
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	lead	1.8	U	1.8	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	magnesium	211000		211000	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	manganese	482		482	J	2,3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	mercury	2.8		2.8	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	potassium	7440		7440	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	sodium	2000000	E	2000000	J	3,4,5
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	thallium	1.5	UW	1.5	UJ	3,4,6
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	zinc	22		22	J	3,4
BAKE16	R07-GW-101A	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	aluminum	39.2	U	39.2	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	antimony	47.2	U	47.2	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	arsenic	3	U	3	UJ	3,4,6
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	barium	22.5	U	22.5	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	beryllium	0.81	B	0.81	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	cadmium	2.8	U	2.8	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	calcium	245000		245000	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	chromium	5.9	U	5.9	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	cobalt	15.5	U	15.5	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	copper	7	B	7	J	2,3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	iron	14.5	UE	14.5	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	lead	1.8	U	1.8	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	magnesium	217000		217000	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	manganese	369		369	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	mercury	1.4		1.4	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	nickel	7.8	U	7.8	UJ	2,3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	potassium	7870		7870	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	selenium	12	U	12	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	silver	6.3	U	6.3	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	sodium	1920000	E	1920000	J	3,4,5
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	thallium	1.5	U	1.5	UJ	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	vanadium	8.5	U	8.5	UJ	2,3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	zinc	16	B	16	J	3,4
BAKE16	R07-GW-101B	WATER	11/24/92	N/A	1	ug/L	cyanide	NA		NA		

43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	alpha-BHC	2.9	U	2.9	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	beta-BHC	2.9	U	2.9	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	delta-BHC	2.9	U	2.9	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	gamma-BHC	0.18	JP	2.9	UJ	4
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	heptachlor	0.2	BJP	2.9	UJ	2
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	aldrin	0.06	JP	2.9	UJ	4
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	heptachlor epoxide	2.9	U	2.9	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endosulfan I	0.28	BJ	2.9	UJ	2
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	deildrin	5.5	U	5.5	UJ	1
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	4,4'-DDE	0.55	BJ	5.5	UJ	2
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endrin	5.5	U	5.5	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endosulfan II	5.5	U	5.5	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	4,4'-DDD	5.5	U	5.5	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endosulfan sulfate	5.5	U	5.5	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	4,4'-DDT	0.097	JP	5.5	UJ	4
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	methoxychlor	0.39	J	0.39	J	1
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endrin ketone	5.5	U	5.5	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	endrin aldehyde	0.18	JP	0.18	NJ	5
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	alpha-chlordane	2.9	U	2.9	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	gamma-chlordane	0.21	JP	0.21	NJ	5
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	toxaphene	285	U	285	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	aroclor-1016	55	U	55	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1221	112	U	112	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1232	55	U	55	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1242	55	U	55	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1248	55	U	55	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1254	55	U	55	U	
43	16SED183	SOIL	11/20/92	41	0.99	ug/Kg	arochlor-1260	55	U	55	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	alpha-BHC	26	U	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	beta-BHC	26	U	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	delta-BHC	26	U	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	gamma-BHC	1.8	JP	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	heptachlor	26	U	26	UJ	4
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	aldrin	26	U	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	heptachlor epoxide	3.7	JP	26	UJ	4
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endosulfan I	26	U	26	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	deildrin	50	U	50	UJ	1
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	4,4'-DDE	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endrin	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endosulfan II	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	4,4'-DDD	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endosulfan sulfate	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	4,4'-DDT	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	methoxychlor	260	U	260	UJ	1
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endrin ketone	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	endrin aldehyde	50	U	50	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	alpha-chlordane	13	JP	13	NJ	5
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	gamma-chlordane	22	JP	22	NJ	5
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	toxaphene	2600	U	2600	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	aroclor-1016	500	U	500	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1221	1010	U	1000	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1232	500	U	500	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1242	500	U	500	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1248	500	U	500	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1254	500	U	500	U	
43	16SED184	SOIL	11/20/92	35	9.8	ug/Kg	arochlor-1260	10000	PC		R	3
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	alpha-BHC	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	beta-BHC	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	delta-BHC	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	gamma-BHC	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	heptachlor	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	aldrin	34	JPD			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	heptachlor epoxide	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endosulfan I	260	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	deildrin	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	4,4'-DDE	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endrin	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endosulfan II	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	4,4'-DDD	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endosulfan sulfate	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	4,4'-DDT	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	methoxychlor	2600	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endrin ketone	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	endrin aldehyde	500	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	alpha-chlordane	8.1	JPD			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	gamma-chlordane	25	JPD			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	toxaphene	26000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	aroclor-1016	5000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1221	10000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1232	5000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1242	5000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1248	5000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1254	5000	U			
43	16SED184D	SOIL	11/20/92	35	98	ug/Kg	arochlor-1260	16000	CD	16000		
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	alpha-BHC	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	beta-BHC	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	delta-BHC	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	gamma-BHC	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	heptachlor	24	U	24	U	

43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	aldrin	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	heptachlor epoxide	24	U	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endosulfan I	200	B	24	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	deildrin	47	U	47	UJ	1
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	4,4'-DDE	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endrin	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endosulfan II	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	4,4'-DDD	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endosulfan sulfate	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	4,4'-DDT	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	methoxychlor	240	U	240	UJ	1
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endrin ketone	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	endrin aldehyde	47	U	47	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	alpha-chlordane	590	PYE	590	R	3
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	gamma-chlordane	37	P	37	NJ	5
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	toxaphene	2400	U	2400	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	aroclor-1016	470	U	470	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1221	1000	U	1000	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1232	470	U	470	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1242	470	U	470	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1248	470	U	470	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1254	470	U	470	U	
43	16SED186	SOIL	11/20/92	31	9.9	ug/Kg	arochlor-1260	19000	PC		R	3
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	alpha-BHC	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	beta-BHC	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	delta-BHC	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	gamma-BHC	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	heptachlor	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	aldrin	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	heptachlor epoxide	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endosulfan I	270	BD			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	deildrin	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	4,4'-DDE	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endrin	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endosulfan II	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	4,4'-DDD	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endosulfan sulfate	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	4,4'-DDT	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	methoxychlor	2440	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endrin ketone	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	endrin aldehyde	470	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	alpha-chlordane	900	PYD	900	NJ	5
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	gamma-chlordane	244	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	toxaphene	24400	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	aroclor-1016	4700	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1221	9600	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1232	4700	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1242	4700	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1248	4700	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1254	4700	U			
43	16SED186D	SOIL	11/20/92	31	99	ug/Kg	arochlor-1260	46000	CD	46000		
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	alpha-BHC	0.35	JP	0.35	NJ	5
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	beta-BHC	21	U	21	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	delta-BHC	21	U	21	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	gamma-BHC	21	U	21	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	heptachlor	0.39	JPB	21	UJ	4
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	aldrin	21	U	21	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	heptachlor epoxide	1.6	JP	21	UJ	4
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endosulfan I	53	B	53		
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	deildrin	40	U	40	UJ	1
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	4,4'-DDE	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endrin	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endosulfan II	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	4,4'-DDD	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endosulfan sulfate	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	4,4'-DDT	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	methoxychlor	210	U	210	UJ	1
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endrin ketone	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	endrin aldehyde	40	U	40	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	alpha-chlordane	150	P	150	NJ	5
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	gamma-chlordane	21	U	21	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	toxaphene	2100	U	2100	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	aroclor-1016	400	U	400	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1221	810	U	800	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1232	400	U	400	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1242	400	U	400	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1248	400	U	400	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1254	400	U	400	U	
43	16SED187	SOIL	11/20/92	19	9.8	ug/Kg	arochlor-1260	12000	PC		R	3
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	alpha-BHC	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	beta-BHC	16	JPD			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	delta-BHC	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	gamma-BHC	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	heptachlor	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	aldrin	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	heptachlor epoxide	12	JPD			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endosulfan I	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	deildrin	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	4,4'-DDE	400	U			

43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endrin	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endosulfan II	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	4,4'-DDD	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endosulfan sulfate	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	4,4'-DDT	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	methoxychlor	2100	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endrin ketone	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	endrin aldehyde	400	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	alpha-chlordane	180	JPD			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	gamma-chlordane	210	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	toxaphene	21000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	aroclor-1016	4000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1221	8100	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1232	4000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1242	4000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1248	4000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1254	4000	U			
43	16SED187D	SOIL	11/20/92	19	98	ug/Kg	arochlor-1260	21000	CD	21000		
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	alpha-BHC	0.22	JP	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	beta-BHC	5	U	5	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	delta-BHC	5	U	5	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	gamma-BHC	0.3	JP	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	heptachlor	0.4	JPB	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	aldrin	0.21	JP	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	heptachlor epoxide	0.32	JP	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan I	0.19	JPB	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	deildrin	9.6	U	9.6	UJ	1
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDE	2.3	JB	2.3	J	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endrin	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan II	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDD	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan sulfate	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDT	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	methoxychlor	50	U	50	UJ	1
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endrin ketone	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	endrin aldehyde	9.6	U	9.6	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	alpha-chlordane	5	U	5	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	gamma-chlordane	0.29	JP	5	UJ	4
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	toxaphene	500	U	500	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	aroclor-1016	100	U	96	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1221	200	U	195	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1232	100	U	96	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1242	100	U	96	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1248	100	U	96	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1254	100	U	96	U	
43	16SED190	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1260	21	J	21	J	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	alpha-BHC	0.18	JP	0.18	NJ	5
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	beta-BHC	5	U	5	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	delta-BHC	5	U	5	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	gamma-BHC	0.39	JP	0.39	NJ	5
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	heptachlor	0.23	BJP	5	UJ	2
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	aldrin	0.23	JP	5	UJ	4
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	heptachlor epoxide	0.38	JP	5	UJ	4
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan I	5	U	5	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	deildrin	9.6	U	9.6	UJ	1
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDE	2.6	BJ	2.6	J	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endrin	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan II	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDD	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endosulfan sulfate	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	4,4'-DDT	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	methoxychlor	50	U	50	UJ	1
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endrin ketone	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	endrin aldehyde	9.6	U	9.6	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	alpha-chlordane	0.19	JP	5	UJ	4
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	gamma-chlordane	0.6	JP	0.6	NJ	5
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	toxaphene	500	U	500	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	aroclor-1016	100	U	96	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1221	200	U	195	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1232	100	U	96	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1242	100	U	96	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1248	100	U	96	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1254	100	U	96	U	
43	16SED191	SOIL	11/20/92	66	0.99	ug/Kg	arochlor-1260	22	J	22	J	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	alpha-BHC	2.6	U	2.6	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	beta-BHC	2.6	U	2.6	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	delta-BHC	2.6	U	2.6	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	gamma-BHC	0.21	JP	0.21	J	6
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	heptachlor	0.18	BJP	2.6	UJ	2
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	aldrin	0.14	J	0.14	J	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	heptachlor epoxide	0.3	JP	0.3	NJ	5
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endosulfan I	2.6	U	2.6	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	deildrin	5.1	U	5.1	UJ	1
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	4,4'-DDE	0.36	BJP	5.1	UJ	2
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endrin	5.1	U	5.1	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endosulfan II	0.17	JP	0.17	NJ	5
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	4,4'-DDD	5.1	U	5.1	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endosulfan sulfate	5.1	U	5.1	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	4,4'-DDT	5.1	U	5.1	U	

43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	methoxychlor	26	U	26	UJ	1
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endrin ketone	5.1	U	5.1	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	endrin aldehyde	0.33	JP	0.33	J	6
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	alpha-chlordane	0.077	JP	0.077	J	6
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	gamma-chlordane	0.24	JP	0.24	J	6
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	toxaphene	260	U	260	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	aroclor-1016	51	U	51	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1221	100	U	104	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1232	51	U	51	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1242	51	U	51	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1248	51	U	51	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1254	51	U	51	U	
43	16SED198	SOIL	11/20/92	36	0.99	ug/Kg	arochlor-1260	51	U	51	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	alpha-BHC	2.6	U	2.6	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	beta-BHC	2.6	U	2.6	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	delta-BHC	2.6	U	2.6	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	gamma-BHC	0.14	JP	2.6	UJ	4
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	heptachlor	0.21	BJP	2.6	UJ	2
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	aldrin	0.11	J	0.11	J	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	heptachlor epoxide	2.6	U	2.6	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endosulfan I	2.6	U	2.6	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	dieldrin	5	U	5	UJ	1
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	4,4'-DDE	0.56	BJ	5	UJ	2
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endrin	5	U	5	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endosulfan II	0.16	JP	5	UJ	4
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	4.4'-DDD	5	U	5	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endosulfan sulfate	5	U	5	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	4,4'-DDT	5	U	5	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	methoxychlor	26	U	26	UJ	1
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endrin ketone	5	U	5	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	endrin aldehyde	0.13	JP	5	UJ	4
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	alpha-chlordane	0.19	J	0.19	J	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	gamma-chlordane	0.29	J	0.29	J	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	toxaphene	260	U	260	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	aroclor-1016	50	U	50	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1221	100	U	101	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1232	50	U	50	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1242	50	U	50	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1248	50	U	50	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1254	50	U	50	U	
43	16SED199	SOIL	11/20/92	35	0.98	ug/Kg	arochlor-1260	50	U	50	U	

SDG #	SAMPLE ID	MATRIX	DATE COLLECTED	% MOISTURE	DIL. FACTOR	UNIT	PARAMETER	CONC.	QUAL.	VAL. CONC.	QUAL.	REF #
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	phenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-chlorophenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	isophorone	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	naphthalene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	acenaphthene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-nitrophenol	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	fluorene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	pentachlorophenol	51	U	51	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	phenanthrene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	anthracene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	carbazole	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	fluoranthene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	pyrene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	chrysene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U	
0115	16SW183	WATER	11/20/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	phenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-chlorophenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-methylphenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-methylphenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	hexachloroethane	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	nitrobenzene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	isophorone	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-nitrophenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	naphthalene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-chloroaniline	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U	
0115	16SW184	WATER	11/20/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U	

0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2-nitroaniline	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	dimethylphthalte	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	acenaphthylene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	3-nitroaniline	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	acenaphthene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-nitrophenol	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	dibenzofuran	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	diethylphthalate	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	fluorene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-nitroaniline	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	pentachlorophenol	50	U	50	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	phenanthrene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	anthracene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	carbazole	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	fluoranthene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	pyrene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	chrysene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	19	J	19	J
0115	16SW184	WATER	11/20/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW184	WATER	11/20/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	phenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-chlorophenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	1,4-dichlorobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	isophorone	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-chloro-3-methylphenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	acenaphthene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-nitrophenol	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	fluorene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	pentachlorophenol	51	U	51	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	anthracene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	carbazole	20	U	20	U

3

0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	pyrene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	chrysene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	14	J	14	J
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW186	WATER	11/20/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	phenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	bis(2-chloroethyl)ether	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-chlorophenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	1,3-dichlorobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	1,4-dichlorobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	1,2-dichlorobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-methylphenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	bis(2-chloroisopropyl)ether	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-methylphenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	n-nitrosodi-n-propylamine	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	hexachloroethane	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	nitrobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	isophorone	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-nitrophenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4-dimethylphenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	bis(2-chloroethoxy)methane	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4-dichlorophenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	1,2,4-trichlorobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	naphthalene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-chloroaniline	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	hexachlorobutadiene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-chloro-3-methylphenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-methylnaphthalene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	hexachlorocyclopentadiene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4,6-trichlorophenol	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4,5-trichlorophenol	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-chloronaphthalene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2-nitroaniline	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	dimethylphthalte	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	acenaphthylene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4-dinitrotoluene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	3-nitroaniline	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	acenaphthene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4-dinitrophenol	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-nitrophenol	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	dibenzofuran	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	2,4-dinitrotoluene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	diethylphthalate	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-chloropehnyl-phenylether	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	fluorene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-nitroaniline	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4,6-dinitro-2-methylphenol	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	n-nitrosodiphenylamine	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	4-bromophenyl-phenylether	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	hexachlorobenzene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	pentachlorophenol	52	U	52	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	phenanthrene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	anthracene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	carbazole	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	di-n-butylphthalate	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	fluoranthene	3	J	3	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	pyrene	6	J	6	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	butylbenzylphthaalte	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	3,3-dichlorobenzidine	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	benzo(a)anthracene	2	J	2	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	chrysene	3	J	3	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	bis(2-ethylhexyl)phthalate	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	di-n-octylphthalate	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	benzo(b)fluoranthene	3	J	3	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	benzo(k)fluoranthene	3	J	3	J
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	benzo(a)pyrene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	indeno(1,2,3-cd)pyrene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	dibenzo(a,h)anthracene	21	U	21	U
0115	16SW187	WATER	11/20/92	NA	2.06	ug/L	benzo(g,h,i)perylene	21	U	21	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	phenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-chlorophenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	1,4-dichlorobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-methylphenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-methylphenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	n-nitrosodi-n-propylamine	20	U	20	U

0115	16SW188	WATER	11/20/92	NA	2	ug/L	hexachloroethane	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	nitrobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	isophorone	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-nitrophenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	naphthalene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-chloroaniline	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-chloro-3-methylphenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4,5-trichlorophenol	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2-nitroaniline	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	dimethylphthalte	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	acenaphthylene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	3-nitroaniline	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	acenaphthene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4-dinitrophenol	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-nitrophenol	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	dibenzofuran	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	diethylphthalate	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	fluorene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-nitroaniline	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4,6-dinitro-2-methylphenol	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	pentachlorophenol	50	U	50	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	phenanthrene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	anthracene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	carbazole	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	fluoranthene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	pyrene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	chrysene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	bis(2-ethylhexyl)phthalate	6	J	6	J
0115	16SW188	WATER	11/20/92	NA	2	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW188	WATER	11/20/92	NA	2	ug/L	benzo(g,h,i)perylene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	phenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-chlorophenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	1,4-dichlorobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-methylphenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-methylphenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	hexachloroethane	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	nitrobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	isophorone	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-nitrophenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	naphthalene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-chloroaniline	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-chloro-3-methylphenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4,5-trichlorophenol	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2-nitroaniline	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	dimethylphthalte	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	acenaphthylene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	3-nitroaniline	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	acenaphthene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrophenol	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-nitrophenol	51	U	51	U

0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	dibenzofuran	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	diethylphthalate	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	fluorene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-nitroaniline	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	pentachlorophenol	51	U	51	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	phenanthrene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	anthracene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	carbazole	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	fluoranthene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	pyrene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	chrysene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	bis(2-ethylhexyl)phthalate	5	J	5	J
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW191	WATER	11/20/92	NA	2.02	ug/L	benzo(g,h,i)perylene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	phenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-chlorophenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	1,4-dichlorobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-methylphenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-methylphenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	n-nitrosodi-n-propylamine	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	hexachloroethane	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	nitrobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	isophorone	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-nitrophenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	1,2,4-trichlorobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	naphthalene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-chloroaniline	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-chloro-3-methylphenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4,5-trichlorophenol	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2-nitroaniline	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	dimethylphthalte	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	acenaphthylene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	3-nitroaniline	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	acenaphthene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrophenol	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-nitrophenol	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	dibenzofuran	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	diethylphthalate	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	fluorene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-nitroaniline	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	pentachlorophenol	51	U	51	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	phenanthrene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	anthracene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	carbazole	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	fluoranthene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	pyrene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	chrysene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	bis(2-ethylhexyl)phthalate	25		25	J
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW192	WATER	11/20/92	NA	2.02	ug/L	benzo(k)fluoranthene	20	U	20	U

0115	16SW192	WATER	11/20/92	NA		2.02	ug/L	benzo(a)pyrene	20	U	20	U	
0115	16SW192	WATER	11/20/92	NA		2.02	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U	
0115	16SW192	WATER	11/20/92	NA		2.02	ug/L	dibenzo(a,h)anthracene	20	U	20	U	
0115	16SW192	WATER	11/20/92	NA		2.02	ug/L	benzo(g,h,i)perylene	20	U	20	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	phenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	bis(2-chloroethyl)ether	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-chlorophenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	1,3-dichlorobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	1,4-dichlorobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	1,2-dichlorobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-methylphenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	bis(2-chloroisopropyl)ether	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-methylphenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	n-nitrosodi-n-propylamine	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	hexachloroethane	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	nitrobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	isophorone	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-nitrophenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4-dimethylphenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	bis(2-chloroethoxy)methane	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4-dichlorophenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	1,2,4-trichlorobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	naphthalene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-chloroaniline	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	hexachlorobutadiene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-chloro-3-methylphenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-methylnaphthalene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	hexachlorocyclopentadiene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4,6-trichlorophenol	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4,5-trichlorophenol	5800	U	5800	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-chloronaphthalene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2-nitroaniline	5800	U	5800	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	dimethylphthalte	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	acenaphthylene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4-dinitrotoluene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	3-nitroaniline	5800	U	5800	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	acenaphthene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4-dinitrophenol	5800	U	5800	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-nitrophenol	5800	U	5800	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	dibenzofuran	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	2,4-dinitrotoluene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	diethylphthalate	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-chloropehnyl-phenylether	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	fluorene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-nitroaniline	5800	U	5800	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4,6-dinitro-2-methylphenol	5800	U	5800	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	n-nitrosodiphenylamine	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	4-bromophenyl-phenylether	2300	U	2300	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	hexachlorobenzene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	pentachlorophenol	5800	U	5800	UJ	14
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	phenanthrene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	anthracene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	carbazole	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	di-n-butylphthalate	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	fluoranthene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	pyrene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	butylbenzylphthaalte	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	3,3-dichlorobenzidine	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	benzo(a)anthracene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	chrysene	2300	U	2300	U	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	bis(2-ethylhexyl)phthalate	1100	J	1100	J	
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	di-n-octylphthalate	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	benzo(b)fluoranthene	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	benzo(k)fluoranthene	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	benzo(a)pyrene	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	indeno(1,2,3-cd)pyrene	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	dibenzo(a,h)anthracene	2300	U	2300	UJ	10
0115	16SED183	SOIL	11/20/92		44	3.93	ug/Kg	benzo(g,h,i)perylene	2300	U	2300	UJ	10
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	phenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	bis(2-chloroethyl)ether	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	2-chlorophenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	1,3-dichlorobenzene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	1,4-dichlorobenzene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	1,2-dichlorobenzene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	2-methylphenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	bis(2-chloroisopropyl)ether	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	4-methylphenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	n-nitrosodi-n-propylamine	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	hexachloroethane	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	nitrobenzene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	isophorone	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	2-nitrophenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	2,4-dimethylphenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	bis(2-chloroethoxy)methane	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	2,4-dichlorophenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	1,2,4-trichlorobenzene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	naphthalene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	4-chloroaniline	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92		40	7.8	ug/Kg	hexachlorobutadiene	4300	U	4300	U	

0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4-chloro-3-methylphenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2-methylnaphthalene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	hexachlorocyclopentadiene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2,4,6-trichlorophenol	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2,4,5-trichlorophenol	11000	U	11000	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2-chloronaphthalene	360	J	360	J	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2-nitroaniline	11000	U	11000	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	dimethylphthalte	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	acenaphthylene	960	J	960	J	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2,4-dinitrotoluene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	3-nitroaniline	11000	U	11000	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	acenaphthene	850	J	850	J	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2,4-dinitrophenol	11000	U	11000	UJ	7
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4-nitrophenol	11000	U	11000	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	dibenzofuran	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	2,4-dinitrotoluene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	diethylphthalate	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4-chloropehnyl-phenylether	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	fluorene	4300	U	4300	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4-nitroaniline	11000	U	11000	U	
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4,6-dinitro-2-methylphenol	22000		22000	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	n-nitrosodiphenylamine	24000		24000	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	4-bromophenyl-phenylether	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	hexachlorobenzene	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	pentachlorophenol	11000	U	11000	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	phenanthrene	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	anthracene	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	carbazole	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	di-n-butylphthalate	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	fluoranthene	2100	J	2100	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	pyrene	4400		4400	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	butylbenzylphthaalte	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	3,3-dichlorobenzidine	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	benzo(a)anthracene	2100	J	2100	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	chrysene	3500	J	3500	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	bis(2-ethylhexyl)phthalate	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	di-n-octylphthalate	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	benzo(b)fluoranthene	1900	J	1900	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	benzo(k)fluoranthene	2600	J	2600	J	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	benzo(a)pyrene	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	indeno(1,2,3-cd)pyrene	1100	J	1100	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	dibenzo(a,h)anthracene	4300	U	4300	UJ	10
0115	16SED184	SOIL	11/20/92	40	7.8	ug/Kg	benzo(g,h,i)perylene	1500	J	1500	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	phenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	bis(2-chloroethyl)ether	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-chlorophenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	1,3-dichlorobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	1,4-dichlorobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	1,2-dichlorobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-methylphenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	bis(2-chloroisopropyl)ether	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-methylphenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	n-nitrosodi-n-propylamine	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	hexachloroethane	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	nitrobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	isophorone	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-nitrophenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4-dimethylphenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	bis(2-chloroethoxy)methane	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4-dichlorophenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	1,2,4-trichlorobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	naphthalene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-chloroaniline	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	hexachlorobutadiene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-chloro-3-methylphenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-methylnaphthalene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	hexachlorocyclopentadiene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4,6-trichlorophenol	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4,5-trichlorophenol	25000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-chloronaphthalene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2-nitroaniline	25000	U	25000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	dimethylphthalte	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	acenaphthylene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4-dinitrotoluene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	3-nitroaniline	25000	U	25000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	acenaphthene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4-dinitrophenol	25000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-nitrophenol	25000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	dibenzofuran	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	2,4-dinitrotoluene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	diethylphthalate	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-chloropehnyl-phenylether	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	fluorene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-nitroaniline	25000	U	25000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4,6-dinitro-2-methylphenol	25000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	n-nitrosodiphenylamine	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	4-bromophenyl-phenylether	10000	U		R	13
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	hexachlorobenzene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	pentachlorophenol	25000	U		R	13

0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	phenanthrene	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	anthracene	1200	J	1200	J	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	carbazole	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	di-n-butylphthalate	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	fluoranthene	4400	J	4400	J	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	pyrene	5100	J	5100	J	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	butylbenzylphthaalte	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	3,3-dichlorobenzidine	10000	U	10000	U	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	benzo(a)anthracene	2700	J	2700	J	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	chrysene	3600	J	3600	J	
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	bis(2-ethylhexyl)phthalate	790	JB	10000	U	11
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	di-n-octylphthalate	10000	U	10000	UJ	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	benzo(b)fluoranthene	6300	J	6300	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	benzo(k)fluoranthene	7500	J	7500	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	benzo(a)pyrene	3400	J	3400	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	indeno(1,2,3-cd)pyrene	1200	J	1200	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	dibenzo(a,h)anthracene	560	J	560	J	10
0115	16SED186	SOIL	11/20/92	40	18.23	ug/Kg	benzo(g,h,i)perylene	10000	U	10000	UJ	10
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	phenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	bis(2-chloroethyl)ether	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-chlorophenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	1,3-dichlorobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	1,4-dichlorobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	1,2-dichlorobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-methylphenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	bis(2-chloroisopropyl)ether	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-methylphenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	n-nitrosodi-n-propylamine	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	hexachloroethane	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	nitrobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	isophorone	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-nitrophenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4-dimethylphenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	bis(2-chloroethoxy)methane	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4-dichlorophenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	1,2,4-trichlorobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	naphthalene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-chloroaniline	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	hexachlorobutadiene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-chloro-3-methylphenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-methylnaphthalene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	hexachlorocyclopentadiene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4,6-trichlorophenol	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4,5-trichlorophenol	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-chloronaphthalene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2-nitroaniline	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	dimethylphthalte	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	acenaphthylene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4-dinitrotoluene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	3-nitroaniline	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	acenaphthene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4-dinitrophenol	22000	U	22000	UJ	7
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-nitrophenol	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	dibenzofuran	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	2,4-dinitrotoluene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	diethylphthalate	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-chloropehnyl-phenylether	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	fluorene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-nitroaniline	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4,6-dinitro-2-methylphenol	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	n-nitrosodiphenylamine	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	4-bromophenyl-phenylether	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	hexachlorobenzene	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	pentachlorophenol	22000	U	22000	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	phenanthrene	740	J	740	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	anthracene	2200	J	2200	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	carbazole	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	di-n-butylphthalate	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	fluoranthene	7700	J	7700	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	pyrene	8000	J	8000	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	butylbenzylphthaalte	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	3,3-dichlorobenzidine	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	benzo(a)anthracene	4400	J	4400	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	chrysene	5700	J	5700	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	bis(2-ethylhexyl)phthalate	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	di-n-octylphthalate	8600	U	8600	U	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	benzo(b)fluoranthene	9300		9300		
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	benzo(k)fluoranthene	5500	J	5500	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	benzo(a)pyrene	2300	J	2300	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	indeno(1,2,3-cd)pyrene	1800	J	1800	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	dibenzo(a,h)anthracene	860	J	860	J	
0115	16SED187	SOIL	11/20/92	24	19.8	ug/Kg	benzo(g,h,i)perylene	1200	J	1200	J	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	phenol	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	bis(2-chloroethyl)ether	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-chlorophenol	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	1,3-dichlorobenzene	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	1,4-dichlorobenzene	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	1,2-dichlorobenzene	4300	U	4300	U	
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-methylphenol	4300	U	4300	U	

0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	bis(2-chloroisopropyl)ether	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-methylphenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	n-nitrosodi-n-propylamine	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	hexachloroethane	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	nitrobenzene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	isophorone	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-nitrophenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4-dimethylphenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	bis(2-chloroethoxy)methane	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4-dichlorophenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	1,2,4-trichlorobenzene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	naphthalene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-chloroaniline	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	hexachlorobutadiene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-chloro-3-methylphenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-methylnaphthalene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	hexachlorocyclopentadiene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4,6-trichlorophenol	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4,5-trichlorophenol	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-chloronaphthalene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2-nitroaniline	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	dimethylphthalte	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	acenaphthylene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4-dinitrotoluene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	3-nitroaniline	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	acenaphthene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4-dinitrophenol	11000	U	11000	UJ	7
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-nitrophenol	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	dibenzofuran	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	2,4-dinitrotoluene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	diethylphthalate	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-chloropehnyl-phenylether	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	fluorene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-nitroaniline	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4,6-dinitro-2-methylphenol	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	n-nitrosodiphenylamine	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	4-bromophenyl-phenylether	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	hexachlorobenzene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	pentachlorophenol	11000	U	11000	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	phenanthrene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	anthracene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	carbazole	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	di-n-butylphthalate	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	fluoranthene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	pyrene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	butylbenzylphthaalte	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	3,3-dichlorobenzidine	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	benzo(a)anthracene	4300	U	4300	U
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	chrysene	220	J	220	J
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	bis(2-ethylhexyl)phthalate	1100	JB	4300	U	11
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	di-n-octylphthalate	4300	U	4300	UJ	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	benzo(b)fluoranthene	630	J	630	J	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	benzo(k)fluoranthene	630	J	630	J	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	benzo(a)pyrene	450	J	450	J	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	indeno(1,2,3-cd)pyrene	4300	U	4300	UJ	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	dibenzo(a,h)anthracene	4300	U	4300	UJ	10
0115	16SED190	SOIL	11/20/92	69	4	ug/Kg	benzo(g,h,i)perylene	4300	U	4300	UJ	10
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	phenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	bis(2-chloroethyl)ether	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-chlorophenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	1,3-dichlorobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	1,4-dichlorobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	1,2-dichlorobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-methylphenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	bis(2-chloroisopropyl)ether	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-methylphenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	n-nitrosodi-n-propylamine	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	hexachloroethane	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	nitrobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	isophorone	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-nitrophenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4-dimethylphenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	bis(2-chloroethoxy)methane	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4-dichlorophenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	1,2,4-trichlorobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	naphthalene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-chloroaniline	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	hexachlorobutadiene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-chloro-3-methylphenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-methylnaphthalene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	hexachlorocyclopentadiene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4,6-trichlorophenol	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4,5-trichlorophenol	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-chloronaphthalene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2-nitroaniline	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	dimethylphthalte	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	acenaphthylene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4-dinitrotoluene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	3-nitroaniline	11000	U	11000	U

0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	acenaphthene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4-dinitrophenol	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-nitrophenol	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	dibenzofuran	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	2,4-dinitrotoluene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	diethylphthalate	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-chloropehnyl-phenylether	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	fluorene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-nitroaniline	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4,6-dinitro-2-methylphenol	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	n-nitrosodiphenylamine	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	4-bromophenyl-phenylether	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	hexachlorobenzene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	pentachlorophenol	11000	U	11000	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	phenanthrene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	anthracene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	carbazole	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	di-n-butylphthalate	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	fluoranthene	220	J	220	J
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	pyrene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	butylbenzylphthaalte	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	3,3-dichlorobenzidine	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	benzo(a)anthracene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	chrysene	210	J	210	J
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	bis(2-ethylhexyl)phthalate	1900	J	1900	J
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	di-n-octylphthalate	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	benzo(b)fluoranthene	390	J	390	J
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	benzo(k)fluoranthene	260	J	260	J
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	benzo(a)pyrene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	indeno(1,2,3-cd)pyrene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	dibenzo(a,h)anthracene	4200	U	4200	U
0115	16SED191	SOIL	11/20/92	69	3.9	ug/Kg	benzo(g,h,i)perylene	4200	U	4200	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	phenol		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	bis(2-chloroethyl)ether	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-chlorophenol		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	1,3-dichlorobenzene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	1,4-dichlorobenzene		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	1,2-dichlorobenzene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-methylphenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	bis(2-chloroisopropyl)ether	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-methylphenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	n-nitrosodi-n-propylamine		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	hexachloroethane	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	nitrobenzene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	isophorone	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-nitrophenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4-dimethylphenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	bis(2-chloroethoxy)methane	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4-dichlorophenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	1,2,4-trichlorobenzene		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	naphthalene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-chloroaniline	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	hexachlorobutadiene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-chloro-3-methylphenol		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-methylnaphthalene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	hexachlorocyclopentadiene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4,6-trichlorophenol	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4,5-trichlorophenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-chloronaphthalene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	dimethylphthalte	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	acenaphthylene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4-dinitrotoluene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	3-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	acenaphthene		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4-dinitrophenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-nitrophenol		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	dibenzofuran	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	2,4-dinitrotoluene		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	diethylphthalate	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-chloropehnyl-phenylether	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	fluorene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4,6-dinitro-2-methylphenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	n-nitrosodiphenylamine	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	4-bromophenyl-phenylether	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	hexachlorobenzene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	pentachlorophenol		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	phenanthrene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	anthracene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	carbazole	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	di-n-butylphthalate	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	fluoranthene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	pyrene		MS		MS
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	butylbenzylphthaalte	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	3,3-dichlorobenzidine	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	benzo(a)anthracene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	chrysene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92	44	3.9	ug/Kg	bis(2-ethylhexyl)phthalate	550	J	550	J

0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	di-n-octylphthalate	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	benzo(b)fluoranthene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	benzo(k)fluoranthene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	benzo(a)pyrene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	indeno(1,2,3-cd)pyrene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	dibenzo(a,h)anthracene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	3.9	ug/Kg	benzo(g,h,i)perylene	2300	U	2300	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	phenol		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	bis(2-chloroethyl)ether	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-chlorophenol		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	1,3-dichlorobenzene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	1,4-dichlorobenzene		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	1,2-dichlorobenzene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-methylphenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	bis(2-chloroisopropyl)ether	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-methylphenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	n-nitrosodi-n-propylamine		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	hexachloroethane	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	nitrobenzene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	isophorone	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-nitrophenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4-dimethylphenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	bis(2-chloroethoxy)methane	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4-dichlorophenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	1,2,4-trichlorobenzene		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	naphthalene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-chloroaniline	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	hexachlorobutadiene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-chloro-3-methylphenol		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-methylnaphthalene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	hexachlorocyclopentadiene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4,6-trichlorophenol	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4,5-trichlorophenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-chloronaphthalene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	dimethylphthalte	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	acenaphthylene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4-dinitrotoluene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	3-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	acenaphthene		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4-dinitrophenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-nitrophenol		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	dibenzofuran	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	2,4-dinitrotoluene		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	diethylphthalate	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-chloropehnyl-phenylether	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	fluorene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-nitroaniline	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4,6-dinitro-2-methylphenol	6000	U	6000	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	n-nitrosodiphenylamine	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	4-bromophenyl-phenylether	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	hexachlorobenzene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	pentachlorophenol		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	phenanthrene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	anthracene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	carbazole	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	di-n-butylphthalate	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	fluoranthene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	pyrene		MS		MS
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	butylbenzylphthaalte	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	3,3-dichlorobenzidine	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	benzo(a)anthracene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	chrysene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	bis(2-ethylhexyl)phthalate	990	J	990	J
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	di-n-octylphthalate	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	benzo(b)fluoranthene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	benzo(k)fluoranthene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	benzo(a)pyrene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	indeno(1,2,3-cd)pyrene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	dibenzo(a,h)anthracene	2400	U	2400	U
0115	16SED183M	SOIL	11/20/92		44	4	ug/Kg	benzo(g,h,i)perylene	2400	U	2400	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	phenol		MS		MS
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	2-chlorophenol		MS		MS
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	1,4-dichlorobenzene		MS		MS
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	2-methylphenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	4-methylphenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	n-nitrosodi-n-propylamine		MS		MS
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	hexachloroethane	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	nitrobenzene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	isophorone	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	2-nitrophenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA		2.04	ug/L	1,2,4-trichlorobenzene		MS		MS

0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-chloro-3-methylphenol		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2,4,5-trichlorophenol	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2-nitroaniline	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	3-nitroaniline	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	acenaphthene		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrophenol	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-nitrophenol		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	fluorene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-nitroaniline	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	51	U	51	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	pentachlorophenol		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	anthracene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	carbazole	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	pyrene		MS		MS
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	chrysene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	12	J	12	J
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW198	WATER	11/20/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	phenol		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethyl)ether	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-chlorophenol		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	1,3-dichlorobenzene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	1,4-dichlorobenzene		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	1,2-dichlorobenzene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-methylphenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroisopropyl)ether	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-methylphenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodi-n-propylamine		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	hexachloroethane	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	nitrobenzene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	isophorone	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-nitrophenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4-dimethylphenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	bis(2-chloroethoxy)methane	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4-dichlorophenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	1,2,4-trichlorobenzene		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	naphthalene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-chloroaniline	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	hexachlorobutadiene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-chloro-3-methylphenol		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-methylnaphthalene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	hexachlorocyclopentadiene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4,6-trichlorophenol	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4,5-trichlorophenol	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-chloronaphthalene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2-nitroaniline	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	dimethylphthalte	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	acenaphthylene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	3-nitroaniline	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	acenaphthene		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrophenol	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-nitrophenol		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	dibenzofuran	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	2,4-dinitrotoluene		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	diethylphthalate	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-chloropehnyl-phenylether	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	fluorene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-nitroaniline	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4,6-dinitro-2-methylphenol	50	U	51	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	n-nitrosodiphenylamine	20	U	20	U

0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	4-bromophenyl-phenylether	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	hexachlorobenzene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	pentachlorophenol		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	phenanthrene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	anthracene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	carbazole	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	di-n-butylphthalate	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	fluoranthene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	pyrene		MS		MS
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	butylbenzylphthaalte	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	3,3-dichlorobenzidine	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	benzo(a)anthracene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	chrysene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	bis(2-ethylhexyl)phthalate	5	J	5	J
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	di-n-octylphthalate	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	benzo(b)fluoranthene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	benzo(k)fluoranthene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	benzo(a)pyrene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	indeno(1,2,3-cd)pyrene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	dibenzo(a,h)anthracene	20	U	20	U
0115	16SW199	WATER	11/20/92	NA	2.04	ug/L	benzo(g,h,i)perylene	20	U	20	U

1	R16SW189	WATER	11/30/92	N/A	1	ug/L	alpha-BHC	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	beta-BHC	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	delta-BHC	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	gamma-BHC	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	heptachlor	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	aldrin	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	heptachlor epoxide	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endosulfan I	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	dieldrin	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	4,4'-DDE	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endrin	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endosulfan II	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	4.4'-DDD	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endosulfan sulfate	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	4,4'-DDT	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	methoxychlor	0.5	U	0.5	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endrin ketone	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	endrin aldehyde	0.1	U	0.1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	alpha-chlordane	0.05	U	0.05	UJ	2
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	gamma-chlordane	0.05	U	0.05	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	toxaphene	5	U	5	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	aroclor-1016	1	U	1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1221	2	U	2	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1232	1	U	1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1242	1	U	1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1248	1	U	1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1254	1	U	1	U	
1	R16SW189	WATER	11/30/92	N/A	1	ug/L	arochlor-1260	1	U	1	U	

B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	aluminum				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	antimony				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3 U	
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	barium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	beryllium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	cadmium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	calcium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	chromium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	cobalt				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	copper				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	iron				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	lead				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	magnesium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	manganese				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	mercury				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	nickel				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	potassium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	selenium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	silver				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	sodium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	thallium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	vanadium				
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	zinc	33.9	*	33.9 J	7
B1114W	21-W-187	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10 UJ	5
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	aluminum				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	antimony				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3 U	
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	barium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	beryllium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	cadmium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	calcium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	chromium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	cobalt				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	copper				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	iron				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	lead				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	magnesium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	manganese				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	mercury				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	nickel				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	potassium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	selenium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	silver				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	sodium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	thallium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	vanadium				
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	zinc	28.1	*	28.1 J	7
B1114W	21-W-188	WATER	11/18/92	N/A	1	ug/L	cyanide	10	U	10 UJ	5
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	aluminum				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	antimony				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	arsenic	3	U	3 U	
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	barium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	beryllium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	cadmium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	calcium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	chromium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	cobalt				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	copper				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	iron				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	lead				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	magnesium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	manganese				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	mercury				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	nickel				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	potassium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	selenium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	silver				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	sodium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	thallium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	vanadium				
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	zinc	14.9	B*	14.9 J	7
B1114W	21-W-189	WATER	11/18/92	N/A	1	ug/L	cyanide				