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K/HS-159

ORGDP

OAK RIDGE GASEOUS DIFFUSION PLANT

MARTIN MARIETTA

RCRA FACILITY INVESTIGATION PLAN CONTAMINATION IN WELL UNW-6 UPGRADIENT OF K-1407-C POND OAK RIDGE GASEOUS DIFFUSION PLANT OAK RIDGE, TENNESSEE

DECEMBER 1988

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ChemRisk Document No. 1338

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MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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K/HS-159

RCRA FACILITY INVESTIGATION PLAN
CONTAMINATION OF WELL UNW-6
UPGRADIENT OF K-1407-C POND
OAK RIDGE GASEOUS DIFFUSION PLANT
OAK RIDGE, TENNESSEE

Prepared by the
Oak Ridge Gaseous Diffusion Plant
Oak Ridge, Tennessee 37831
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MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U. S. DEPARTMENT OF ENERGY
under contract DE-AC05-84OR21400

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1. INTRODUCTION

Within the confines of the Oak Ridge Gaseous Diffusion Plant (ORGDP) are hazardous waste treatment, storage, and disposal facilities; some are in operation while others are no longer in use. These solid waste management units (SWMUs) are subject to assessment by the U.S. Environmental Protection Agency (EPA), as required by the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). The RCRA Facility Investigation (RFI) Plans are scheduled to be submitted for all the SWMUs during calendar years 1987 and 1988. The RFI Plan - General Document (K/HS-132) includes information applicable to all the ORGDP SWMUs and serves as a reference document for the site-specific RFI Plans. This plan is based upon requirements described in the draft document, RFI Guidance, Vols. I-IV, December 1987 (EPA 530/SW-87-001).

This document is the site-specific RFI Plan for the K-1407-C Holding Pond Area. Specifically, this plan focuses on the area surrounding UNW-6, a well just upgradient from the K-1407-C Holding Pond. The C-Pond is an interim status RCRA facility to be clean-closed under RCRA. Analysis of groundwater samples taken from UNW-6 as part of the ORGDP Groundwater Protection Program revealed elevated levels of lead, barium, and total chromium. This plan investigates the area surrounding UNW-6 to determine the source of these contaminants.

Contained within this document are geographical, historical, operational, geological, and hydrological data specific to the K-1407-C area. The potential for release of contamination through the various media to receptors is addressed. A sampling plan is proposed to further determine the extent of release of contamination to the surrounding environment. Included are health, safety, quality assurance (QA), and

quality control (QC) procedures to be followed when implementing the sampling plan. QC procedures for remedial actions occurring on the Oak Ridge Reservation (ORR) are presented in The Environmental Surveillance Procedures Quality Control Program, Martin Marietta Energy Systems Inc., ESH/SUB/87-21706(1), and QA guidelines for ORGDP investigations are presented in The K-25 Remedial Action Program QA Plan, K/HS-231. Procedures for managing and displaying data collected from the RFI are summarized.

2. OBJECTIVES OF RCRA FACILITY INVESTIGATION PLANNING

2.1 OBJECTIVES

This RFI plan will identify actions necessary to determine the source of contamination found in an upgradient well (UNW-6) at the K-1407-C Holding Pond. The plan summarizes existing site information and addresses the potential for further contaminant migration into the soil, groundwater, surface water, and air.

2.2 EVALUATION CRITERIA

In order to prepare and implement a comprehensive sampling plan and to effectively evaluate analytical sampling results, evaluation criteria must first be established. Criteria for evaluating the extent of release of contaminants are based on existing state and federal regulatory guidance and best technical judgment.

The primary media of interest for the K-1407-C RFI are soil and groundwater. Soil samples will be collected as a part of the RFI and analyzed for contaminants as described in Section 8 of this document. Groundwater samples will be collected and analyzed according to the protocol of the ORGDP Groundwater Protection Program. The sampling methodology and analytical procedures are designed to characterize the contaminants of interest at or below the levels summarized in Table 2.2 of K/HS-132.

2.3 SCHEDULE FOR SPECIFIC RFI ACTIVITIES

A list of the sampling and analysis activities to be performed for this RFI and the duration of each activity is shown in Table 2.1.

Table 2.1. Duration of RFI activities for the K-1407-C Holding Pond Area

	Activities	Duration
1.	Site preparation and soil sample location	4 weeks
2.	Collection of soil samples	12 weeks
3.	Collection of groundwater samples	52 weeks
4.	Analysis of soil samples	32 weeks
5.	Analysis of groundwater samples	60 weeks[1]
6.	Compilation of data and data presentation	18 weeks
7.	Evaluation of results and recommendations (may include preliminary risk assessments)	12 weeks
8.	Preparation of RFI report and submittal to EPA	8 weeks
9.	Additional sampling phases (if needed)	TBD

[1]Groundwater sample analysis will occur concurrently with groundwater sample collection.

2.4 FEASIBLE ALTERNATIVES

Knowledge of feasible corrective measures has been used in preparing this RFI plan. Based on existing geologic, hydrologic, and contaminant source data, potential corrective measures for the K-1407-C area have been identified and are shown in Table 2.2. These corrective measures will be reevaluated after the RFI report is completed.

2.5 RISK ASSESSMENT

The environmental and public health risks associated with possible site contamination and the remedial action alternatives listed in Table 2.2 will be evaluated. This evaluation will consist of a characterization of contaminant sources, the environmental setting, the magnitude of release, pathways to human exposures, and characterization of risks. The site sampling plan has been designed to provide data necessary for performing risk assessments.

Table 2.2. Potential corrective measures for the K-1407-C Holding Pond Area

General Response Action	Technologies
Monitoring	Surveillance monitoring and analysis
Removal of source	Excavation and treatment and/or disposal of contaminated soil in an approved landfill
Containment from groundwater and surface water	Cap - synthetic membrane, clay, asphalt, multimedia cap, concrete, or chemical sealants and stabilizers
	Subsurface collection drains - french drains, tile drains, pipe drains
	Vertical containment barriers - soil bentonite slurry wall, cement-bentonite slurry wall, vibrating beam, grout curtains, steel sheet piling
	Groundwater diversion pumping - well points, deep wells, suction wells, ejector wells
Treatment of groundwater	Collect the groundwater and pump to a wastewater treatment plant or on-site treatment by aeration, filtration, or carbon adsorption

3. DESCRIPTION OF CURRENT CONDITIONS

3.1 GEOGRAPHICAL INFORMATION

The K-1407-C Holding Pond Area is located in the northeastern corner of ORGDP (Figure 3.1) between the Northeast Patrol Road and the K-1700 Stream (Figure 3.2). This area is inside the ORGDP perimeter security fence, and personnel entering the plant must pass through an attended guard portal. Complete geographical information is located in Section 3.1 of K/HS-132.

3.2 HISTORICAL INFORMATION

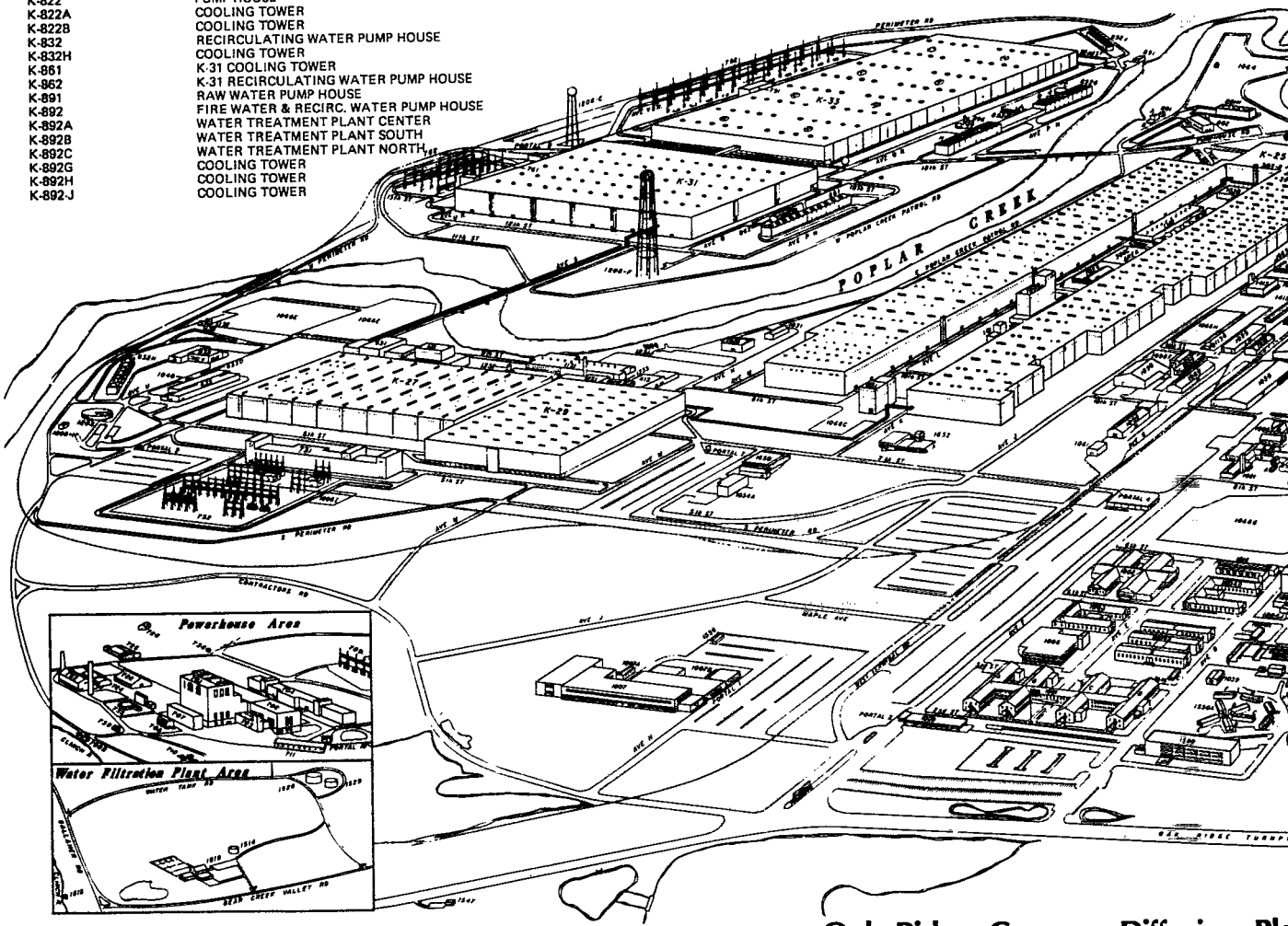
The K-1407-C Holding Pond (C-Pond), a retention basin with an approximate storage volume of 2.5 million gallons, was used primarily for storing potassium hydroxide scrubber sludge generated at ORGDP facilities. The sludges in the C-Pond contain low-level radioactive contaminants.

The C-Pond received sludges that were removed from the K-1407-B Holding Pond. These sludges were generated during neutralization and precipitation of metal-laden solutions and corrosive wastewater treated in the K-1407-A Neutralization Tank. Some waste streams which required no neutralization were discharged directly into the K-1407-B Pond. The hazardous waste sludges stored in the pond are more fully characterized in Section 4. A waste sampling program, which included sampling the soil layer under the waste sludge was conducted in May 1985, and typical analyses for the solid wastes contained in C-Pond are given in Appendix A.

Sludges are no longer disposed of in the C-Pond, and the material in the pond is being removed and stabilized in concrete at the K-1419 Sludge Fixation Plant. The concrete is being stored in 85- and 96-gallon drums at the K-1417 Storage Yard, and currently, a delisting petition is being

KEY

K-101	PROCESS (VACANT)
K-131	FIELD MAINT. SHOP & OFFICE
K-303-1 Thru K-312-3	K-25 PROCESS
K-402-1 Thru K-402-9	K-27 PROCESS
K-413	PRODUCT WITHDRAWAL
K-502-1 Thru K-502-3	K-29 PROCESS
K-601	MAINTENANCE TRAINING
K-602-1 Thru K-602-6	K-31 PROCESS
K-631	PROCESS TAILS
K-633	ORGDP TEST LOOP FACILITY
K-701	BOILER HOUSE (VACANT)
K-702	TURBINE ROOM & DISCH. TUNNEL (VACANT)
K-704	K-25 MAIN SWITCH HOUSE
K-709	K-25 SWITCHYARD
K-710	SEWAGE TREATMENT
K-711	WELD TRAINING FACILITY
K-722	STORAGE WAREHOUSE
K-723	STORAGE WAREHOUSE
K-724	EXCESS STORAGE
K-725	WAREHOUSE (VACANT)
K-726	STORAGE BLDG.
K-731	K-27 & K-29 SWITCH HOUSE (CONTROL ROOM)
K-732	K-27 & K-29 SWITCHYARD
K-735	STORAGE BUILDING
K-736	STORAGE BUILDING
K-761	K-31 SWITCH HOUSE (CONTROL ROOM)
K-762	K-31 SWITCHYARD
K-791	K-33 SWITCH HOUSE (CONTROL ROOM)
K-792	K-33 SWITCHYARD
K-796-A	MAINTENANCE STORAGE
K-801	INTAKE WATER PUMP HOUSE
K-801A	WATER TREATMENT PLANT
K-801B	CLARIFLOW TANK
K-801H	COOLING TOWER (PARTIAL BASIN ONLY)
K-802	RECIRCULATING WATER PUMP HOUSE
K-822	PUMP HOUSE
K-822A	COOLING TOWER
K-822B	COOLING TOWER
K-832	RECIRCULATING WATER PUMP HOUSE
K-832H	COOLING TOWER
K-861	K-31 COOLING TOWER
K-862	K-31 RECIRCULATING WATER PUMP HOUSE
K-891	RAW WATER PUMP HOUSE
K-892	FIRE WATER & RECIRC. WATER PUMP HOUSE
K-892A	WATER TREATMENT PLANT CENTER
K-892B	WATER TREATMENT PLANT SOUTH
K-892C	WATER TREATMENT PLANT NORTH
K-892G	COOLING TOWER
K-892H	COOLING TOWER
K-892-J	COOLING TOWER
K-896	COOLING WATER TREATMENT PLANT
K-902-1 Thru K-902-8	K-33 PROCESS
K-1000	CONFERENCE ROOM (PORTAL 2)
K-1001	ADMINISTRATION BUILDING
K-1002	CAFETERIA
K-1003	DISPENSARY
K-1003A	DISPENSARY OFFICE TRAILER
K-1004-A Thru K-1004-C	LABORATORY FACILITIES
K-1004-D	LABORATORY FACILITIES
K-1004-H	GAS CYLINDER STORAGE
K-1004-J	LABORATORY COMPLEX
K-1004-L	LABORATORY FACILITY
K-1004-N	COOLING TOWER
K-1004-N1	COOLING TOWER
K-1004-P	ISOSTATIC TEST FACILITY
K-1006	LABORATORY FACILITIES
K-1007	COMPUTER CENTER
K-1008A Thru K-1008D	CHANGE HOUSES
K-1008E Thru K-1008F	CHANGE HOUSES
K-1010	LABORATORY REC. & HANDLING
K-1015	LAUNDRY
K-1020	HEALTH, SAFETY & ENVIRONMENTAL AFFAIRS
K-1021	OLD FIRE HEADQUARTERS
K-1023	LABORATORY
K-1024	LABORATORY & MAINT. TRAINING
K-1025A Thru K-1025E	RAD. SOURCE STORAGE & WHSE. SHIP. DRUMS
K-1030	MAINTENANCE SHOP & OPERS. ANALYSIS OFF.
K-1034A	PLANT RECORDS VAULT
K-1035	MAINTENANCE BUILDING
K-1036	MAINTENANCE STORES-SHIPP. & REC.
K-1037	AVLIS FACILITY
K-1039	TELEPHONE BUILDING
K-1040	MAINTENANCE SHOP K-633
K-1045	STORAGE BUILDING
K-1045A	FIRE TRAINING FACILITY
K-1052	AMDL LABORATORY
K-1055	COMPRESSED GAS CYLINDER STORAGE
K-1056	LUMBER WAREHOUSE
K-1058	BU
K-1059	BU
K-1061	OI
K-1064	SA
K-1066 A Thru 1066 L	CY
K-1071	TR
K-1095	PA
K-1097	CA
K-1098	CE
K-1098E	SA
K-1098F	SA
K-1098 G	MA
K-1101	AI
K-1131	FE
K-1132 & K-1133	HE
K-1200	CC
K-1201	CC
K-1203	WA
K-1206D	FI
K-1206E	FI
K-1208	MI
K-1026F	FI
K-1210	CC
K-1210A	AI
K-1211	CT
K-1216	SC
K-1220	CE
K-1225	S.
K-1231	PR
K-1231A	ST
K-1232	CH
K-1233	CC
K-1234	ST
K-1301	NI
K-1302	ST
K-1303	RI
K-1320	EN
K-1328	EN



Oak Ridge Gaseous Diffusion Pla

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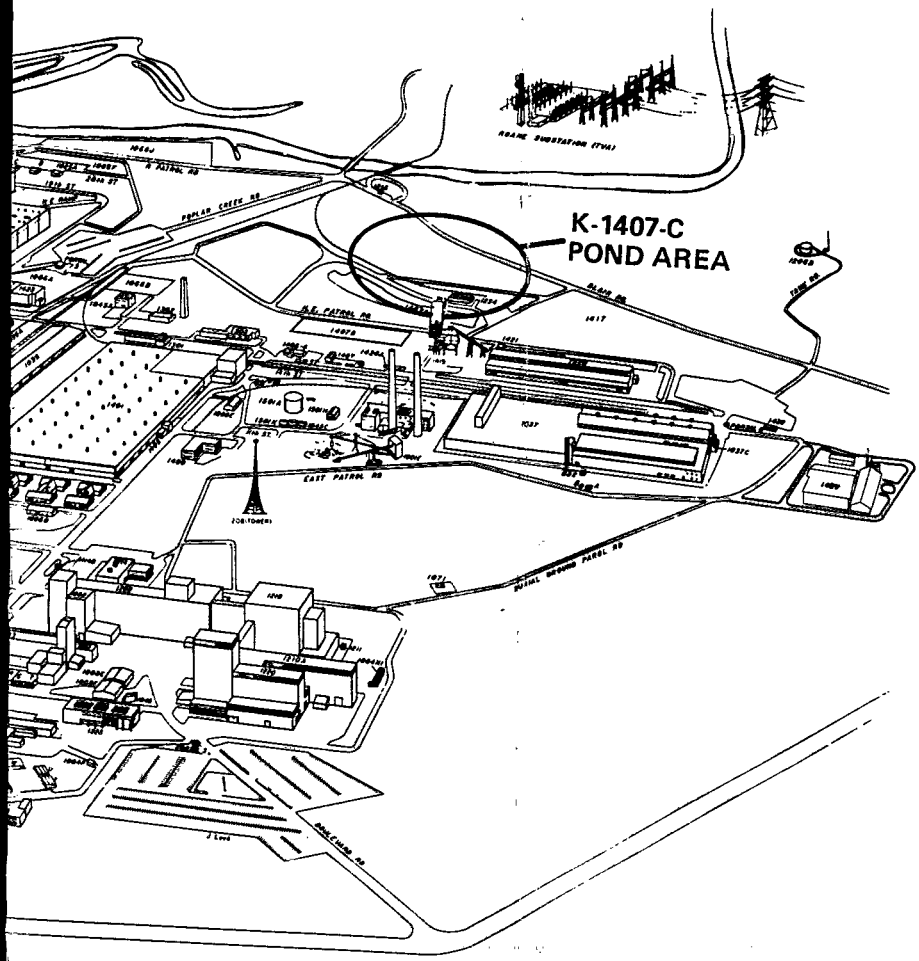
Fig. 3.1. ORGDP location map for the K-140

ING MATERIAL WAREHOUSE	K-1400	ENGINEERING OFFICE BUILDING
ING MATERIAL WAREHOUSE	K-1401	MAINTENANCE BUILDING
ORAGE BUILDING	K-1405-6	HIGH TEMPERATURE LABORATORY
GE YARD	K-1407	LABORATORY & STORAGE
OER STORAGE YARDS	K-1407-B-F	HOLDING PONDS
COMPACTOR	K-1410	NICKEL PLATING FACILITY
SHOP	K-1413	LABORATORY – ENGINEERING
NTER SHOP	K-1414	GARAGE
T STORAGE	K-1414B	VEHICLE WASH FACILITY
BLAST FACILITY (OLD)	K-1415	STORAGE SHED
BLAST FACILITY (NEW)	K-1416	ACID STORAGE
TENANCE (SHED)	K-1417	CASTING YARD
ANT	K-1419	SLUDGE FIXATION FACILITY
& TAILS	K-1420	DECONTAMINATION & URANIUM RECOVERY
ORAGE	K-1423	TOLL ENRICHMENT FACILITY
ONENT PREPARATION LAB. (CPL)	K-1425	WASTE OIL STORAGE
RESSOR BUILDING	K-1435	TSCA INCINERATOR
WATER & SEWAGE TREATMENT PLANT	K-1501	STEAM PLANT
VATER TANK – 300,000 GALLON	K-1501A	FUEL OIL TANK
VATER TANK – 100,000 GALLON	K-1501E	TRANSFER/CRUSHER BUILDING
DROLOGICAL TOWER	K-1501H	MAINTENANCE FACILITY
VATER TANK – 400,000 GALLON	K-1513	PUMP HOUSE
ONENT TEST FACILITY (CTF)	K-1514	SANITARY WATER TANK – 220,000 GALLON
NCED ENGINEERING TEST FACILITY	K-1515	WATER FILTRATION PLANT
TORAGE	K-1528	CONC. WATER STOR. TANK – 2,500,000 GALLON
HOUSE	K-1529	STEEL WATER STOR. TANK – 1,500,000 GALLON
RIFUGE PLANT DEMONST. FACILITY	K-1546-C	ENGINEERING TRAILER
OFFICE BUILDING	K-1547	VISITORS OVERLOOK
ESS	K-1548	CANTEEN TRAILER
AGE	K-1550 Thru K-1550-W	ENGINEERING OFFICE TRAILERS
ICAL RECOVERY FACILITY	K-1556	COMPUTER OFFICE TRAILER
ECTION FACILITY	K-1580	ENGINEERING OFFICE BUILDING
AGE	K-1600	TECHNOLOGY TEST FACILITY
GEN PLANT	K-1650	CENTRAL CONTROL FACILITY
AGE	K-1652	SECURITY & PLANT PROTECTION DIVISION
ARCH COMPRESSOR BUILDING		
EERING OFFICE		
EERING OFFICE		



t

C pond area

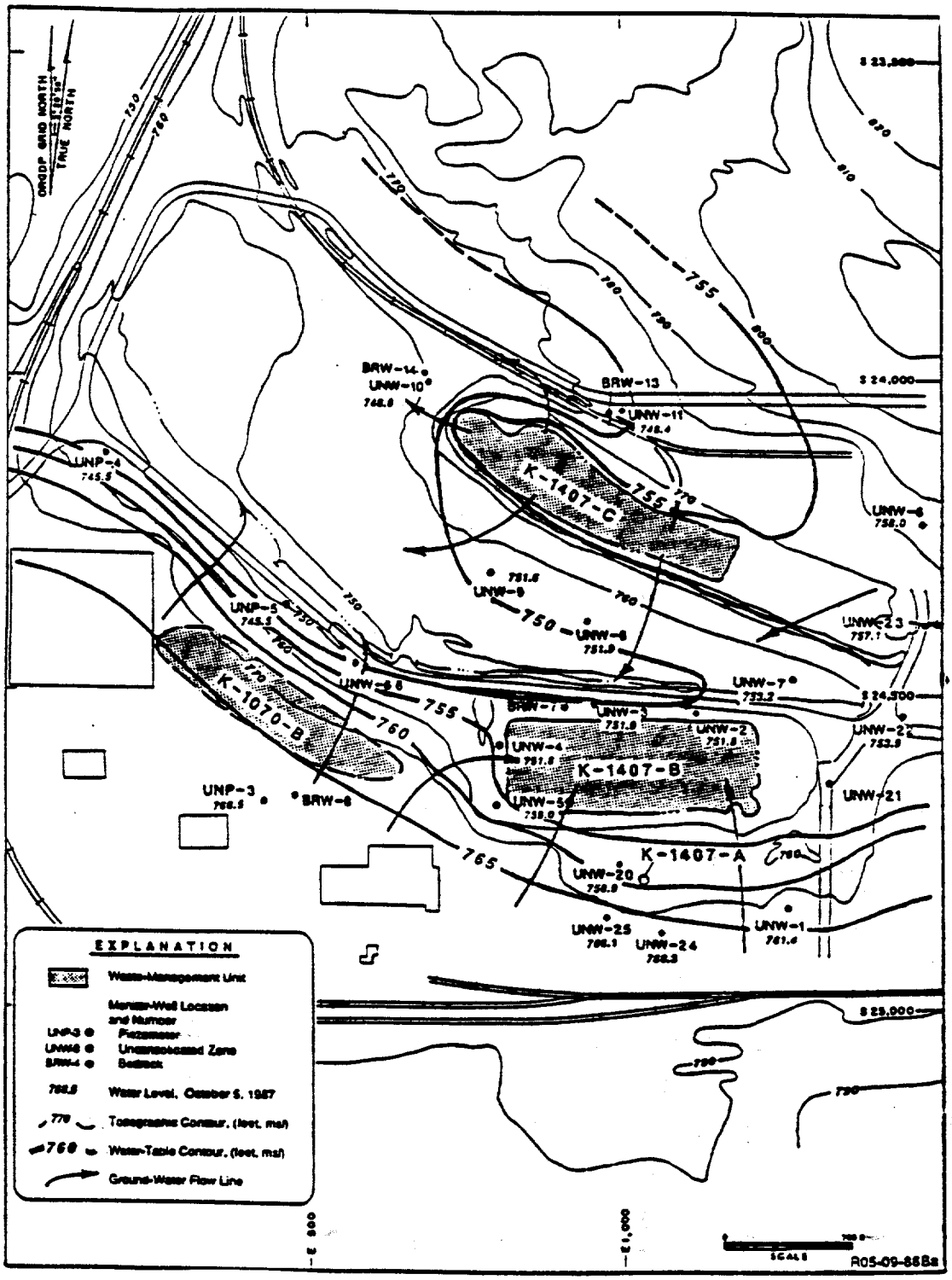


Fig. 3.2. Monitoring well locations in the K-1407-C area

prepared to delist the fixed material under RCRA as a hazardous waste. The material will then be managed as a low-level radioactive waste. Following the removal of the waste, the pond will be clean-closed by June 1, 1989. Details of the closure plan are found in the Closure Plan for the K-1407-C Retention Basin (ORGDP, May 1988, K/HS-221).

In 1985, six monitoring wells were installed in the K-1407-C area (UNW-6 to UNW-11). UNW-6 serves as the upgradient well providing background data for the K-1407-C hazardous waste management unit, and the remaining five wells function as the point of compliance for the K-1407-C unit (Figure 3.2). As a background well, UNW-6 is supposed to be both hydraulically upgradient and unaffected by the C-Pond. Water level measurements have confirmed that UNW-6 is an upgradient well, and the groundwater analyses from all the wells around K-1407-C show the well to be unaffected by seepage from the C-Pond. For example, high concentrations of highly mobile, unattenuated parameters such as chlorides, sulfates, sodium, etc., are observed in the downgradient wells but are present only in apparently low natural concentrations in UNW-6. A description of these wells and the groundwater sampling and analysis procedures are included in the Closure Plan for the K-1407-C Retention Basin (ORGDP, May 1988, K/HS 221).

From 1985 to 1986, five quarters of base-year background samples were obtained from these wells, and in April 1987 the first annual/semiannual samples were obtained. Statistical analysis of these latter data indicated significant increases in conductivity (an indicator parameter for groundwater contamination) in four of the downgradient wells when compared to base-year data for upgradient well UNW-6. Resampling for anions, metals and conductivity, in August 1987, verified these increases by statistically comparing (t-tests) the resamples with the base year. Conductivity measurements in wells UNW-7, UNW-9, UNW-10, and UNW-11 failed the state-required statistical test at the 0.01 level of significance.

A false-positive determination assessment was conducted, in part, to investigate the causes of the increased levels of conductivity in the original six wells. From the constituents that indicated a statistical increase, attention was focused on those that were considered to be hazardous and/or above the maximum concentration limits (MCLs) for the primary and secondary drinking water standards. Groundwater monitoring data are given in Appendix B, and details of this statistical assessment are included in K-1407-B and K-1407-C Surface Impoundment False-Positive Groundwater Assessment (ORGDP, K/HS-214). Statistical conclusions and observations from this report and subsequent rebuttals include:

- The presence of nonhazardous metals is the primary cause of the statistically significant levels of conductivity. Conductivity levels appear to be chiefly related to concentrations of calcium, chloride, magnesium, manganese, sodium, and strontium. None of the hazardous metals were significantly higher than the base-year levels of the upgradient well (UNW-6) for any more than one of the compliance point wells. Some of these metals are also found in the upgradient well.

- A few of the samples taken during the assessment period showed arsenic, barium, chromium, lead, and mercury levels sporadically above drinking water standards (pH measurements were occasionally lower than the range of acceptable pH levels). Their filtered counterparts were well below EPA Interim Primary Drinking Water Standards. Assessment period averages for these five metals were not statistically different from base-year averages, except for lead in upgradient well UNW-6, which also had barium and chromium results above drinking water standards. The presence of these contaminants in the upgradient well suggests that there may be additional contamination sources for the K-1407-C downgradient wells.

- Of the hazardous constituents which either indicated a statistically significant difference or were temporarily above drinking water standards, none are clearly attributable to the surface impoundments.

- A modified detection plan will be implemented until closure of the K-1407-C impoundment. The detection plan would involve "within-well" statistical analyses for metals, anions, and conductivity. The plan would sample all of the K-1407-C wells semiannually until closure. (This sampling will include the original six wells and the recently added UNW-22, UNW-23, BRW-7, BRW-13, and BRW-14.) Statistical analyses at this unit would, however, continue to be "within-well" tests in order to avoid future false-positive indications.

The spoils removed for the construction of the K-1417 Storage Yard in 1985 are presently piled above the C-Pond upgradient of UNW-6. There was evidence of waste, including construction debris, in the spoils during excavation. However, this spoils pile is an unlikely source of metals contamination in this area due to the immobility of the detected parameters. Current plans call for these spoils to be used to fill the K-1407-C basin when sludge removal is completed. Complete historical information is located in Section 3.2 of K/HS-132.

4. CHARACTERIZATION OF THE CONTAMINANT SOURCE

Waste information for the K-1407-C Holding Pond is presented in Tables 4.1 and 4.2. Typical analyses for the solid wastes contained in K-1407-C are given in Appendix A. These data indicate that the soil samples taken below the sludge in the bottom of the pond do not contain concentrations of hazardous waste constituents for organic and EP toxicity constituents above the proposed Toxicity Characteristic Leaching Procedure (TCLP) limits. Acetone was the only organic constituent present in the underlying soil layers; however, it was not detected in the groundwater. For the EP Toxicity extracts, constituents were detected in all soil layers but not in groundwater samples. Tables 4.3 and 4.4 present the summary of characteristic data for organic constituents and EP constituents from the sludge and three soil layers. The lack of groundwater contamination led to the decision to clean close the pond. Tables 4.3 and 4.4 present the summary of characteristic data for organic constituents and EP constituents from the sludge and three soil layers.

Table 4.1. Waste information for the K-1407-C Holding Pond

Hazardous Waste	Hazard	Basis
Metal hydroxide sludge (from K-1407-B)	EP toxic	Listed waste F006 Miscellaneous waste[1]
Potassium hydroxide scrubber sludges	Corrosive	pH $\geq$ 12.5 (D002)

[1]These wastes consist of a wide variety of wastes that may be classified as EP toxic, corrosive, or toxic. Only small quantities of these wastes are generated and sent to the K-1407-A Neutralization Pit.

(source: Closure Plan for the K-1407-C Retention Basin [ORGDP, May 1988])

Table 4.2. Waste information for the K-1407-C Holding Pond[1]

K-1420 Raffinate and Condensate
K-1501 Zeolite Regeneration
K-1401 Metals and Acid Base Cleaning Solutions
K-1420 Plating Operations
K-1413 Laboratory Solutions
K-1420-C Floor Pan Cleaning Solutions
Coal Pile Runoff
K-1032 Cooling Water (Recirculating Water System)
K-1420 Plating Operations Rinse Waters
K-1501 Steam Plant Boiler Blowdown
K-1420 Decontamination Facility Spray Booth Rinse Water
K-1420-A Floor Pan Cleaning
K-1420 Cylinder Cleaning Solution
K-1420 Vapor Blaster Solutions
K-1420 Pigtail Cleaning Solution
K-25 Building Cleaning Solutions (from the cleaning of nickel plated and steel plated pipe)

(source: RFI Plan for the K-1407 WAG [K/HS-135])

[1]These waste streams entered the K-1407-A Neutralization Pit prior to discharge to the K-1407-B Holding Pond or entered the B Pond directly. Waste characteristics are more fully characterized in the RFI Plan for the K-1407 WAG, K/HS-135.

Table 4.3. Summary of soil and sludge characteristic data for organic constituents

Parameter	Concentrations in mg/l Sludge[a] Layer	A-Layer[a] (0"-6")	B-Layer[a] (6"-12")	C-Layer[a] (12"-18")	Proposed Toxicity Characteristic Contaminants (mg/l)
Acetone	1.0	.29	.63	.68	
Fluorocarbons	3.5	ND	ND	ND	
Freon-113	.27	ND	ND	ND	
Methylene Chloride	.04	ND	ND	ND	8.6
Toluene	.09	ND	ND	ND	14.4
Trans-1,2-dichloroethylene	.14	ND	ND	ND	
Bromoform	<.05	ND	ND	ND	
Chloroform	<.02	ND	ND	ND	
Freon-123	<.1	ND	ND	ND	
Tetrachloroethylene	<.04	ND	ND	ND	.1
Trichloroethylene	<.02	ND	ND	ND	.07
1,1,2,2-tetrachloroethane	<.07	ND	ND	ND	

(source: Closure Plan for the K-1407-C Holding Pond [ORGDP, K/HS-221], May 1988)

[a]Soils and sludge sampled in May 1985.

Table 4.4. Summary of soil and sludge characteristic data for EP tox extracts

Parameter	Concentrations in mg/l Sludge[a] Layer	A-Layer[a] (0"-6")	B-Layer[a] (6"-12")	C-Layer[a] (12"-18")	Proposed Toxicity Characteristic Contaminants (mg/l)
Endrin	.00006	.00009	.00007	ND	.003
Lindane	.034	.01	ND	ND	.06
Methoxychlor	.00005	.00007	.00005	ND	1.4
Silvex	.01	.01	ND	ND	.14
2,4-D	.059	.05	ND	ND	1.4
	EP TCLP	EP	EP	EP	
Arsenic	.016 ND	.007	ND	.007	5.0
Barium	1.02 <.001	1.99	.78	.57	100.0
Cadmium[c]	.03 <.003	.004	.003	.04	1.0
Lead[d]	.011 <.05	.071	.015	.053	5.0
Mercury	.042 <.0002	.004	ND	.005	0.2
Silver	ND <.006	ND	ND	ND	5.0
Chromium	.28 <.01	.01	.01	.01	5.0

(source: Closure Plan for the K-1407-C Holding Pond [ORGDP, K/HS-221], May 1988)

[a]Soils and sludge sampled in May 1985.

5. CHARACTERIZATION OF THE ENVIRONMENTAL SETTING

The general geology of the ORGDP area is shown in Figure 5.1 and has been compiled from three major sources: (1) Hydrogeology of the Oak Ridge Gaseous Diffusion Plant Site, Geraghty and Miller, 1986, (2) recent unpublished work by R. H. Ketelle, Oak Ridge National Laboratory, and (3) "Geologic Map of the Oak Ridge Area, Tennessee," by W. M. McMaster U.S. Geological Survey, 1958. The following geologic descriptions and discussions of hydrogeology are based on these sources, and specific data, permeabilities, etc., are referenced as applicable.

The K-1407-C Holding Pond Area is located in the northeast part of the ORGDP within the watershed of the K-1700 Stream. The pond is situated on the north side of the K-1700 Stream, and the surrounding land surface slopes southwestward toward the stream.

Three bedrock wells, BRW-7, -13, and -14, and eight unconsolidated zone wells, UNW-6, -7, -8, -9, -10, -11, -22, and -23, are located around or near the C-Pond. The logs of these wells are included in Appendix D. These logs are the basis for the lithologic descriptions and geologic interpretations presented herein. BRW-7 is intended to furnish groundwater data relative to K-1407-B; however, it is also representative of the same bedrock unit which underlies K-1407-C. The well locations are shown in Figure 3.3.

5.1 HYDROGEOLOGY

The K-1407-C area is underlain by rocks of the upper part of the Conasauga Group which typically consists of massive limestone or limestone interbedded with calcareous shale (Appendix D). The limestones are generally gray to blue-gray, fine-grained and oolitic, and the shale is gray or blue to green-gray. Some chert will normally occur in the Conasauga limestone. The upper Conasauga which may also contain some dolomite or dolomitic limestone, grades stratigraphically downward (to the south here) into predominantly calcareous shale.

The structural attitude of bedrock strata in the K-1407-C area is inferred from field measurements in nearby areas by R. H. Ketelle of Oak Ridge National Laboratory (unpublished geologic map), and those measurements which relate to this area are indicated on Figure 5.1. The beds are very steeply inclined, dipping mainly to the south, although some northward dips may occur. The strike of the inclined beds is approximately east-west. The steep and variable dips are indicative of structural deformation related to faulting and fault block movements. The Conasauga strata, along with the Copper Ridge dolomite just to the north of the K-1407-C area, have been thrust against and/or over the Chickamauga limestone by a branch of the Whiteoak Mountain fault. The trace of the branch fault is just to the west of the subject site. The faulting and related stresses will have caused extensive fracturing and jointing within the affected bedrock strata, particularly in the more competent limestones and dolomites. The "secondary calcite" noted in the logs (Appendix C) is indicative of fracture filling.

The unconsolidated zone consists primarily of clay with minor amounts of silt and some scattered, weathered limestone fragments. Some chert fragments have also been observed. The clays are probably both residual from weathering of the underlying bedrock and colluvial from weathered materials upslope from the site. The thickness of the unconsolidated zone here varies from about 10 to 39 feet (Appendix C). The soil cover is relatively thin in the vicinity of the K-1700 Stream and becomes thicker upslope to the east and northeast.

Analyses of unfiltered groundwater samples from UNW-6 have indicated a small concentration of lead in the unconsolidated zone in that area. Lead is a naturally occurring element in many of the soils and rocks of East Tennessee. The Tennessee Division of Geology has reported lead contents in residual soils in upper East Tennessee ranging from 10 to 30 ppm (Analyses of Geologic Materials, Boone Lake Area, TN, Report of Investigation No. 35, Tennessee Division of Geology, 1973). The average amount of lead in the earth's crustal material is reported to be 13 ppm, and the lead content in normal soils is indicated to range from less than 10 to several hundred ppm (Principles of Geochemistry, Third Edition,

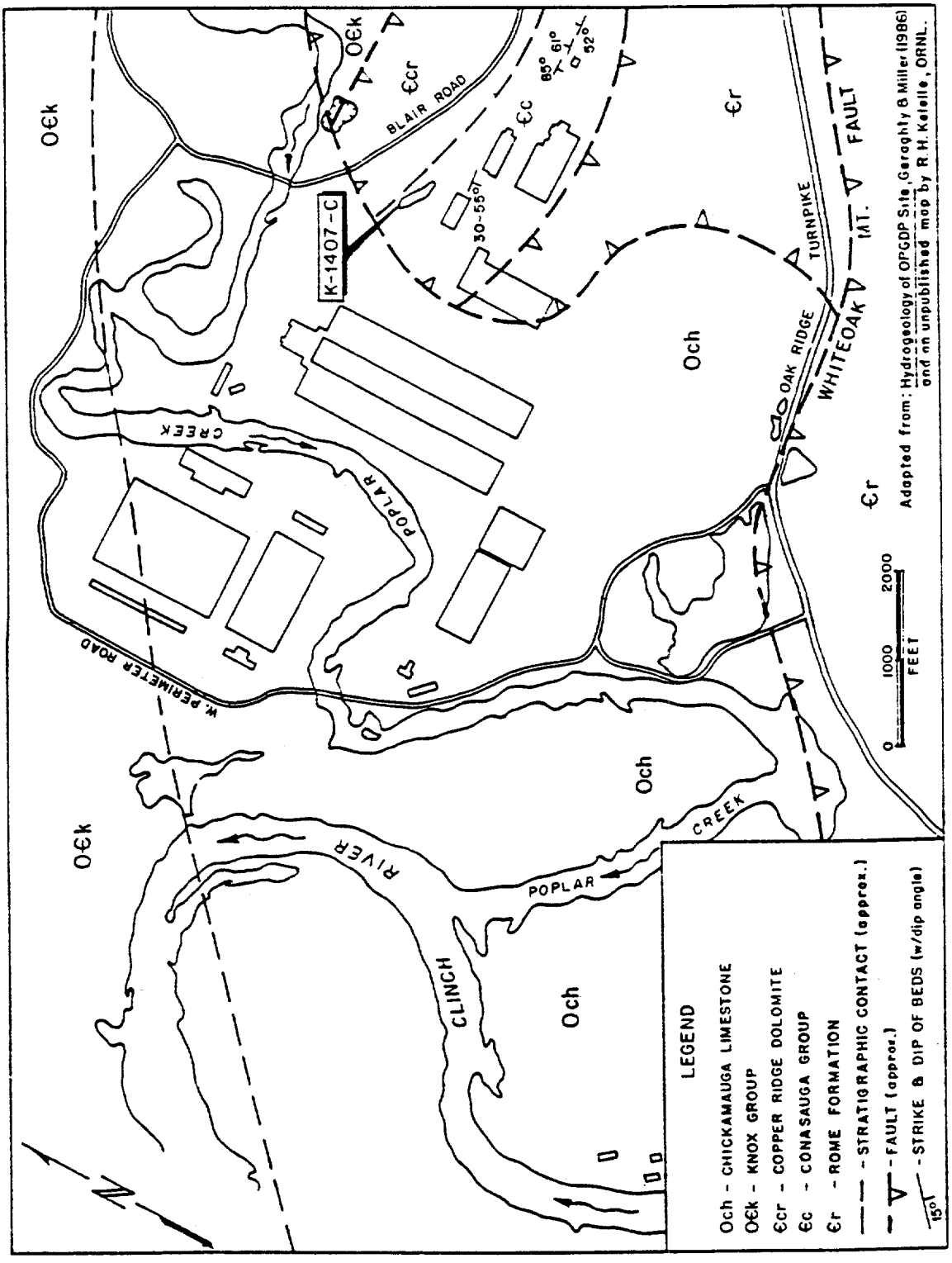


Fig. 5.1. Areal geology of the ORGDP

John Wiley and Sons, NY, 1966). Analyses of soil samples to a depth of 24 inches at K-1407-C (Appendix A) show lead contents to range from 12 to 55 ppm, well within the range of natural occurrence.

Groundwater storage and flow in the K-1407-C area will occur mainly in the limestone bedrock within a system of interconnecting, solution-enlarged fractures and bedding planes. The shales are more subject to plastic deformation, and their fractures tend to be relatively "tight" and restrictive to groundwater flow. Permeability tests by Geraghty and Miller (Hydrogeology of the ORGDP Site, 1986) indicate the hydraulic conductivity of bedrock in this area to range from 10^{-4} to 10^{-5} centimeters per second (cm/sec). The wells used for these tests were BRW-7 and -8. Hydraulic conductivity in the unconsolidated zone is indicated to range from 1.06×10^{-3} to as low as 2.51×10^{-7} cm/sec (Geraghty and Miller, 1986).

The direction of groundwater flow in the unconsolidated zone in the K-1407-C area will generally be southwest to west; however, there will be local flow variations in the immediate vicinity of the pond due to the mounding influence of the pond. The flow direction in bedrock is probably west to northwest toward Poplar Creek.

5.2 SURFACE WATER

Surface water runoff in the K-1407-C area will flow southwest and westward to the K-1700 Stream which then flow northwestward for about 1,500 feet to its confluence with Poplar Creek. There are no storm drains or other surface flow control structures in the immediate K-1407-C area.

There are no perennial streams (other than K-1700) or springs on this site. The K-1407-C area is above the 100-year flood level according to data generated by the Tennessee Valley Authority (TVA) and presented in Figure 3.5 of RFI Plan - General Document K/HS-132.

5.3 AIR

No site-specific air quality data are available for this SWMU. Martin Marietta Energy Systems, Inc., has an ongoing study of the air quality and meteorological conditions, and general data for the ORGDP are available in RFI Plan - General Document K/HS-132.

6. IDENTIFICATION OF POTENTIAL PATHWAYS AND RECEPTORS

Assessment of an inactive hazardous waste disposal or storage site is required to evaluate the site's potential for health or safety risks to the environment, public, and personnel. Determination of such risks must be based on evaluations of both the potential pathways of contaminant migration from toxic releases and the possible receptors of the contamination. Information used in the evaluations of the pathways which might release contaminants from the K-1407-C Holding Pond area has been obtained from analysis of data from the environmental media in the proximity of K-1407-C. K/HS-132 will serve as a general reference concerning the potential pathways and receptors for the ORGDP.

The detection of elevated levels of metals in an upgradient well at the K-1407-C SWMU presents the possibility of an unidentified contaminant source. Soil samples will be taken to determine the location of the contaminant source, and groundwater wells in the area will continue to be monitored. Because the contaminants of concern have been detected in groundwater, the initial sampling phase will investigate only soil and groundwater in order to locate the contaminant source. Should this phase of investigation indicate a source which could be releasing contamination to surface water or air, additional phases of sampling for these media will be considered. In addition, petrographic analyses will be performed to determine if the lead is of natural origin.

6.1 POTENTIAL PATHWAYS OF MIGRATION

6.1.1 Soil

The presence of suspended metals in the groundwater environment in the upgradient well (UNW-6) at the K-1407-C Holding Pond Area presents the possibility of an upgradient contaminant source. The location of this source will be determined by analysis of soil samples as specified in Section 8 of this document.

6.1.2 Groundwater

Groundwater monitoring will continue in the K-1407-C area for all the wells identified in Section 3.2. Metal analyses will be performed in addition to the parameters that are currently required under the ORGDP Groundwater Protection Program, and sampling and analysis will follow the protocol of this program.

6.2 POTENTIAL RECEPTORS

6.2.1 Human Populations

The security controls required by the Department of Energy (DOE) on entrance to the ORGDP prevent public access to the K-1407-C Holding Pond Area. This control, coupled with the low potential for off-site groundwater contaminant migration from the K-1407-C area due to the low permeability of the unconsolidated zone and bedrock, poses little likelihood of affected human populations in the ORGDP area. The risk to human populations will be further assessed after the data are collected and analyzed.

6.2.2 Fauna and Flora

K/HS-132 discusses the rare, threatened, and endangered plant and animal species which are thought to inhabit the area. To date, there has been no report that any of these species in the vicinity of K-1407-C or the surrounding area are directly threatened by any possible contamination present there. The risk of contamination released from the site to the local flora and fauna will be assessed subsequent to the RFI.

6.3 SUMMARY AND CONCLUSIONS

The presence of elevated levels of metals (namely lead) in an upgradient monitoring well and evaluation of the area show sufficient evidence for environmental contamination and warrants further investigation.

7. EXISTING MONITORING DATA

Groundwater monitoring data from UNW-6, -7, -8, -9, -10, and -11, averaged for the base year and assessment period, are presented in Appendix B.

8. SAMPLING PLAN

8.1 SAMPLING AND ANALYTICAL STRATEGY

Preparation of the K-1407-C RFI is based on the detection of elevated levels of lead in the C-Pond upgradient monitoring well (UNW-6). Chromium and barium have also been found at elevated concentrations in well UNW-6 during the false-positive assessment period. The focus of this RFI will be the determination of the source of this metal contamination. Source location and characterization will be accomplished by the collection of soil and groundwater samples and subsequent analysis for metals which will include the contaminants of interest (lead, chromium, and barium). Petrographic analyses will also be conducted on the residue from filtered groundwater samples to determine if the lead is of natural origin.

8.2 STATISTICAL SET-UP FOR SAMPLING

8.2.1 Soil Sampling

The area around UNW-6 will be sampled to provide initial estimates of contaminant levels occurring in the soil. Samples will be collected at 15 locations according to a 50 foot grid system (Figure 8.1). Each location will be drilled to bedrock and samples taken from the coring. From each drilling to bedrock, a soil sample will be taken from every distinct layer of soil, from boundaries between soil layers, and at regular intervals of four feet of depth in thick homogeneous layers (Figure 8.2). For thicker layers, soil from two adjacent two-foot split barrels will be composited, with care not to composite across soil layer types or layer boundaries. The individual samples will be divided, with a portion of each sample saved in case a backup analysis is needed. The randomized drilling orders are given in Table 8.1. The order of sample analysis will be randomized after the samples are collected.

Table 8.1 Randomized drilling order

Drilling Order	Drilling Location
1	15
2	12
3	7
4	5
5	6
6	14
7	11
8	10
9	9
10	13
11	2
12	3
13	4
14	1
15	8

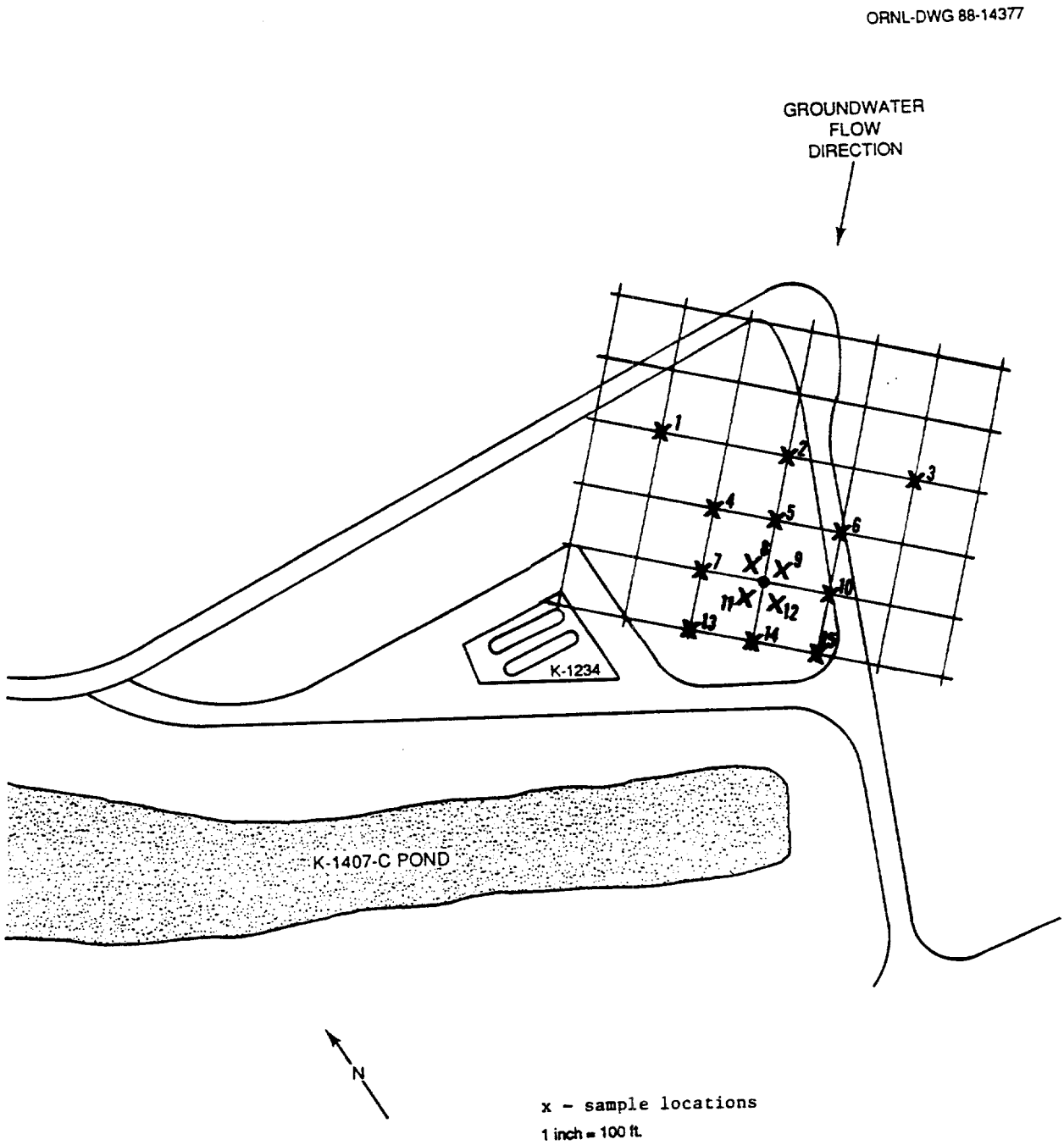


Fig. 8.1. K-1407-C sampling locations

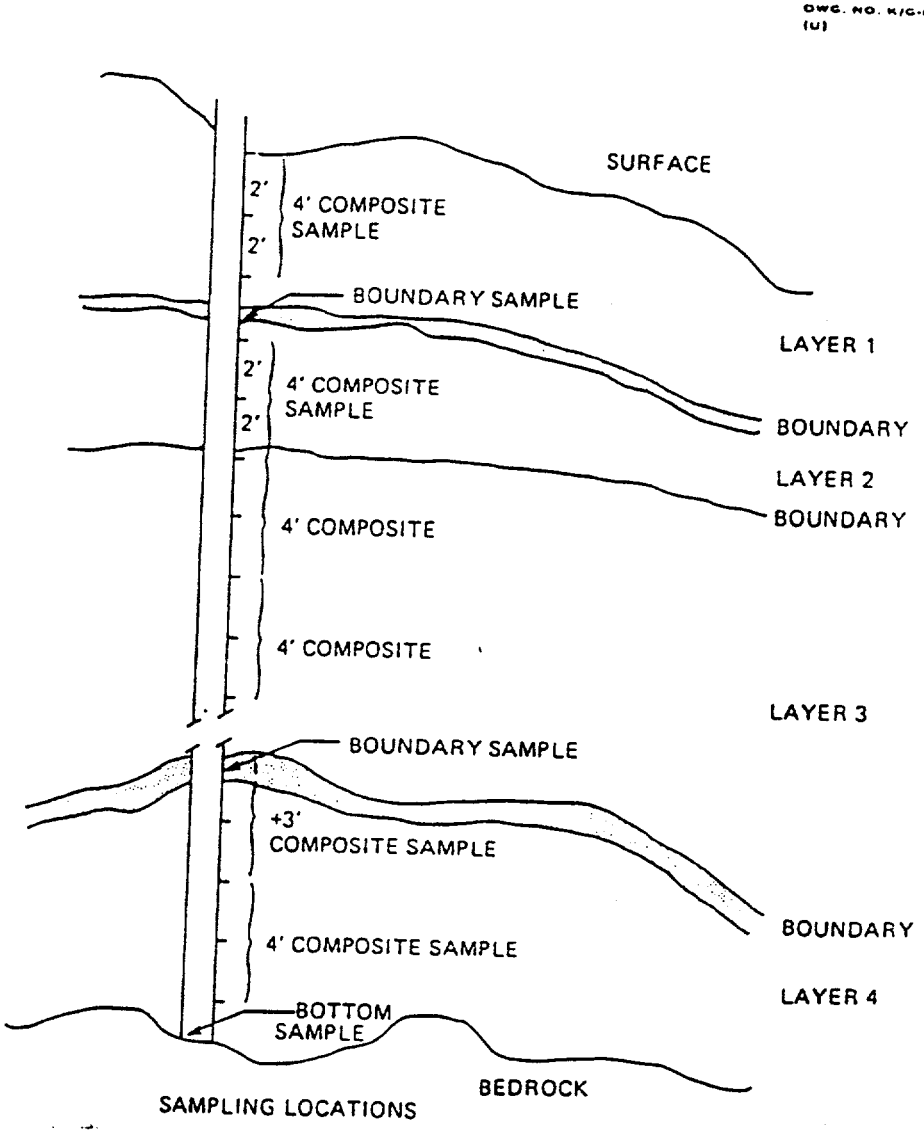


Fig. 8.2. Sampling within a core

8.3 FIELD SAMPLING

All field sampling procedures in Section 8.3 are more fully described and documented in The Environmental Surveillance Procedures Quality Control Program, Martin Marietta Energy Systems, Inc., (ESH-Sub/87-21706/1).

8.3.1 Site Preparation

In order to accurately locate the drilling locations within the K-1407-C area, arrangements will be made through Martin Marietta Engineering to have the site surveyed. The sampling locations, as shown in Figure 8.1, will be marked with stakes. A detailed map of the area will be drawn indicating the sampling points and their coordinates.

8.3.2 Equipment and Supplies

The drilling contractor will provide all necessary drilling equipment (hollow core auger, split-barrel sampler, etc.). The following field sampling supplies will be required:

- nonionic detergent, Micro (International Products Corp.)
- deionized water
- glass containers (one quart capacity), pre-cleaned, with Teflon-lined lids
- bound logbook
- chain-of-custody seals
- sample labels
- chain-of-custody forms
- stainless steel trays
- aluminum foil
- stainless steel spatulas

8.3.3 Soil Sampling Procedure

Collection of samples from this site will follow ASTM Method D-1586-84 Penetration Test Split-Barrel Sampling of Soils. The drilling will be performed by a private drilling contractor. A hollow core auger will be used to remove the soil above each segment to be sampled, and the split-barrel sampler will be driven into the soil through the center of the auger. This technique will obtain a sample that is undisturbed by the auger operation.

Using a 2-foot long split-barrel sampler, samples will be removed from each position in 2-foot segments. Samples will be collected to refusal. At each 2-foot increment, the split-barrel sampler will be removed from the drilling rig (to be performed by the drilling crew) and separated to expose the sample. Between samples, the equipment used for sample transfer will be cleaned with nonionic detergent and water and rinsed with deionized water. The split-barrel samplers will be detergent cleaned and rinsed with water by the drilling company.

Soil from two adjacent coring segments will be composited using the protocol described in Section 8.2. The appropriate segments will be combined in a foil-lined stainless steel pan, homogenized, and transferred to a pre-cleaned glass container. Either the entire soil sample or sufficient sample to fill the sample container will be retained. From 10 percent of the core segments (to be determined in the field), duplicate samples will be submitted to the laboratory to fulfill duplicate requirements according to Section 7.3 of K/HS-132.

Sample containers will be labelled with the site identification, date, time, sample identification number, and the sampler's name. Sample date, site identification, time, sample identification number, sampler's name, and surveyed coordinates of the sample will be recorded. In addition to the required entries, any other pertinent information and/or observations will be recorded. The logbook used for these records will

contain a map of the area and a copy of the sampling plan. The sample containers will be sealed and transported to the laboratory under chain-of-custody protocol as referenced in Section 7.4 of K/HS-132.

After the sampling of each coring is complete, bored holes will be filled with a grout column, as described in Section 7.1.3 of K/HS-132, to prevent any further contamination of the groundwater.

8.4 ANALYTICAL PROTOCOL

Analytical sampling with the following salient features is proposed. Soil samples will be collected at locations outlined in Section 8.2. Core samples will be continuously withdrawn in 2-foot increments until refusal. Two adjacent core samples will be composited to form a single sample for analysis.

All samples will be analyzed for metals utilizing Inductively Coupled Plasma (ICP) Emission Spectrometry. Unused soil from each sample will be archived for further analysis, if needed. Additionally, since lead is the contaminant of primary interest, its determination will utilize one of the methods for lead outlined in Table 7.4 in K/HS-132.

The statistically significant (based on t-tests) amounts of lead in the groundwater samples from UNW-6 have been found in the unfiltered samples, while filtered portions of the same samples have shown either no lead or only trace amounts. The lead occurrence in UNW-6 is, therefore, particulate in nature and part of the unconsolidated zone. The lead apparently occurs as either discrete particles of mineral matter (or chemicals) or, it is adsorbed onto certain soil constituents such as clay minerals or silt grains, etc. The nature (origin) of the lead, i.e., natural or contaminant, may be determined by petrographic analysis involving such methods as x-ray diffraction or a surface scanning method (i.e., ESCA).

8.5 SAMPLE ANALYSIS

Soil analysis will follow standard EPA protocol as outlined in Test Methods for Evaluating Solid Waste; Physical/Chemical Methods (SW-846). The QA/QC requirements outlined in Section 7.3 of K/HS-132 will be adhered to for all analyses.

9. DATA MANAGEMENT PROCEDURES

The results of the chemical analyses of samples from the potential release areas will be presented in a clear and logical format, so as to best illustrate any patterns in the data. These will include tabular, graphical, and other visual displays such as maps and contour plots described in Table 8.1 of K/HS-132.

Statistical analyses will provide for treatment of duplicate laboratory analyses, for results which are reported as less than detection limit, and for examination for statistical outliers. Whenever possible, values which are recorded as less that detection limits will be handled according to RCRA Ground-Water Monitoring Enforcement Guidance Document, (OSWER-9950.1), September 1986, which directs calculation through the use of Cohen's statistical methodology. This is found in "Tables for Maximum Likelihood Estimates from Single Truncated and Singly Censored Samples", (Technometrics, Volume 3, pp. 535-541, 1961). Otherwise, the detection limit will be used in the statistical analyses.

Statistical modeling methods such as least squares and kriging will be used to estimate response surfaces for use in developing concentration contours for the contaminants, where appropriate. Statistical confidence bounds (upper, lower, or both) will be determined for the contaminants at a given location, where appropriate.

10. HEALTH AND SAFETY PROCEDURES

10.1 INTRODUCTION

Special requirements and procedures to protect the health and safety of the investigating team, ORGDP site personnel, and the general public during the K-1407-C RFI are addressed in this section. K/HS-132 details the health, safety, environmental, security, plant protection, and emergency response organizations which are in place at ORGDP. These organizations provide the support to ORGDP line organizations to meet the requirements for health and safety during the RFIs. They provide the communications, response, and reporting for any plant emergency; on-site medical facilities with medical surveillance, treatment, monitoring, and periodic physical examinations; health physics and industrial hygiene surveillance hazard evaluation and control; operational safety accident prevention and control; plant security and visitor control.

In addition, K/HS-132 identifies the organizational responsibilities for health and safety at SWMUs during the RFIs. The document includes the methodology for establishing the work zones of each SWMU, the level of protection required in the exclusion zone, decontamination procedures, personnel exposure limits, monitoring requirements, and respiratory protection requirements.

10.2 KNOWN HAZARDS AND RISKS

The substances of safety and health concern for the K-1407-C RFI are metals (specifically lead).

10.3 LEVEL OF PROTECTION AND MONITORING PARAMETERS

The level of personnel protection and monitoring is designated below for sampling.

Level of Designation		Monitoring Parameters	
A		Airborne Pollutants	X
B			
C		Explosion Potential	
D	X	Radiation	X

10.4 DESIGNATION OF WORK AREA ZONES

The three zones (Exclusion, Contamination Reduction, and Support) will be established for the work activity area in accordance with the methodology developed in Section 9 of K/HS-132. As work activity requires, the exclusion zone will move to encompass areas of sampling.

10.5 LEVEL OF PROTECTION AND EXPOSURE LIMITS

The personnel protection recommended for work activity in the exclusion zone of the K-1407-C SWMU is Level D.

The responsibility of limiting the exposure of the workers to nonhazardous levels of radiation resides in the Site Health and Safety Officer (SHSO) using instruments described in Section 9 of K/HS-132. The SHSO will monitor for radiation in the air with a radiation meter capable of measuring 0.1 mR/hr. If the contamination exceeds 2 mR/hr (ORGDP Health Physics action level), the SHSO will order work to be stopped, and all personnel will be removed from the exclusion zone. The SHSO will request that a health physicist assess the potential hazard of site conditions and determine if the sampling operations may continue.

All participants in the K-1407-C soil sampling activities, including contractors, must be aware that excavation equipment, shoes, and other protective clothing could become contaminated with radioactive material. Surveys will be performed on all such items before and after each sampling

operation. Each survey will include monitoring all applicable personnel and equipment. Any equipment found to be contaminated above the guidelines for unrestricted release (alpha - 5,000 dpm/100 cm^2 of surface, 1,000 dpm/100 cm^2 transferrable, and 0.1 mR/hr beta and gamma) will be decontaminated. Should the reading exceed an action level of 2 mR/hr (set by ORGDP Health Physics as an action point), the SHSO will order work to be stopped, and the crew will be removed. The SHSO will request the presence of a health physicist on site who will assess the potential hazard of the conditions and determine whether or not work should continue.

11. REFERENCES

American Society for Testing and Materials, ASTM Method D 1586-84, Penetration Test Split-Barrel Sampling of Soils

Principles of Geochemistry, 3rd Edition, John Wiley and Sons, NY, 1966

Cohen, "Tables for Maximum Likelihood Estimates from Single Censored Samples," Technometrics, Vol. 3: 535-541, (1961)

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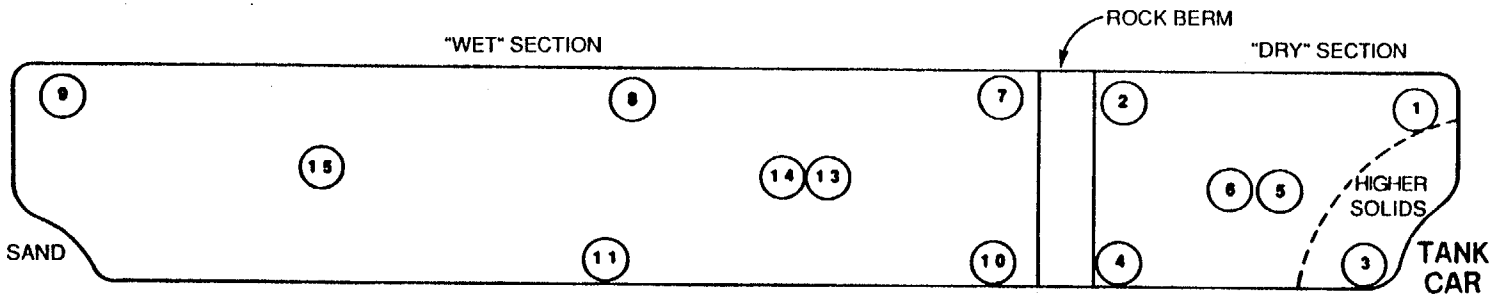
APPENDIX A

ORNL-DWG 88-14378



SAMPLES WERE TAKEN FROM 15 CORINGS FROM THE SLUDGE LAYER AND FROM FOUR DEPTHS BELOW THE SLUDGE: THE A-LAYER (0" - 6"), THE B-LAYER (6" - 12"), THE C-LAYER (12" - 18"), AND THE D-LAYER (18" - 24").

Fig. A.1. K-1407-C Pond sampling locations for 1985 sampling event

Summary of all of the data for C Pond except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	33715.	73000.	8500.
Arsenic	10.	97.	5.0
Barium	101.	230.	13.
Beryllium	0.22	1.1	0.030
Boron	1199.	11000.	23.
Cadmium	0.51	1.8	0.30
Calcium	3823.	90000.	370.
Chromium	234.	2400.	19.
Cobalt	29.	210.	2.0
Copper	195.	2000.	0.40
Iron	30600.	73000.	2500.
Lead	34.	140.	6.0
Lithium	21.	33.	2.9
Magnesium	5427.	23000.	2200.
Manganese	1671.	6500.	73.
Molybdenum	1.0	1.0	1.0
Nickel	1915.	21000.	12.
Niobium	1.2	5.3	0.70
Phosphorous	2116.	18000.	310.
Potassium	5586.	15000.	1400.
Selenium	5.2	13.	5.0
Sodium	3910.	20000.	740.
Stontium	42.	150.	5.2
Thorium	25.	52.	20.
Titanium	277.	770.	110.
Vanadium	40.	72.	11.
Zinc	118.	660.	39.
	Radionuclides (dpm/g)*		
Cesium	68.	511.	15.
Neptunium	25.	183.	0.10
Plutonium	35.	241.	0.050
Technetium	1878.	13600.	55.
Uranium (ug/g)	194.	1841.	1.0
U-235 (wt. %)	1.3	2.6	0.70
	Organics (ug/g)		
Acetone	0.19	1.0	0.10
Benzene	0.040	0.040	0.040
Bromomdichloromethane	0.020	0.020	0.020

* Except where otherwise noted.

Summary of all of the data for C Pond except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Fluorocarbons	0.0030	0.0040	0.0020
Freon-113	0.10	0.27	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.040	0.030
Other Halomethanes	0.10	0.10	0.10
PCB	0.0010	0.0010	0.0010
Permethylated Cyclosiloxane	2.4	2.4	2.4
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.060	0.090	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Density @25C (g/ml)	1.3	1.7	1.1
pH	10.	11.	8.1
Phosphate (Total) (ug/g)	6350.	54000.	930.

C Pond leach test data
Summary of all of the leach test data

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000062	0.000090	0.000050
Lindane	0.083	0.10	0.000020
Methoxychlor	0.000047	0.000070	0.000040
Silvex	0.0088	0.010	0.0040
Toxaphene	0.0010	0.0020	0.0010
2,4-D	0.033	0.059	0.028
	Metals (mg/l)		
Arsenic	0.0057	0.016	0.0050
Barium	0.55	1.9	0.10
Cadmium	0.0051	0.040	0.0020
Chromium	0.030	0.28	0.010
Lead	0.0088	0.071	0.0040
Mercury	0.0034	0.032	0.0010
Nickel	1.7	18.	0.010
Selenium	0.0075	0.034	0.0050
Silver	0.010	0.010	0.010

C Pond Data
Data for the sludge layer (except the leach test)

parameter	mean	max	min
	Metals (ug/g)		
Aluminum	25392.	42000.	85000.
Arsenic	20.	97.	5.0
Barium	89.	150.	13.
Beryllium	0.030	0.030	0.030
Boron	4252.	11000.	85.
Cadmium	0.65	1.8	0.30
Calcium	35000.	90000.	30000.
Chromium	601.	2400.	30.
Cobalt	51.	210.	2.0
Copper	583.	2000.	120.
Iron	25185.	73000.	2500.
Lead	42.	140.	6.0
Lithium	16.	31.	2.9
Magnesium	7885.	11000.	5500.
Manganese	383.	1000.	73.
Molybdenum	1.0	1.0	1.0
Nickel	5667.	21000.	240.
Niobium	2.7	5.3	0.70
Phosphorus	5016.	18000.	320.
Potassium	9507.	15000.	2600.
Selenium	6.0	13.	5.0
Sodium	7388.	15000.	740.
Strontium	111.	150.	95.
Thorium	37.	52.	20.
Titanium	361.	770.	110.
Vanadium	23.	45.	11.
Zinc	221.	660.	68.
	Radionuclides (dpm/g)*		
Cesium	119.	511.	15.
Neptunium	45.	183.	1.5
Plutonium	62.	241.	1.0
Technetium	3476.	13600.	293.
Uranium (ug/g)	515.	1841.	58.
U-235 (wt. %)	1.6	2.6	1.3
	Organics (ug/g)		
Acetone	0.32	1.0	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data
Data for the sludge layer (except the leach test)

parameter	mean	max	min
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Fluorocarbons	0.0030	0.0040	0.0020
Freon-113	0.11	0.27	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
Methylene Chloride	0.030	0.040	0.030
Other Malomethanes	0.10	0.10	0.10
Permethylated Cyclosiloxane	2.4	2.4	2.4
PCB	0.0010	0.0010	0.0010
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.062	0.090	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
pH	10.	11.	8.1
Density @25C (g/ml)	1.4	1.7	1.1
Phosphate (Total) (ug/g)	15049.	54000.	960.

C Pond Data

Summary of the leach test data for the sludge layer

parameter	mean	max	min
	Pesticides (mg/l)		
Endrin	0.000052	0.000060	0.000050
Lindane	0.083	0.10	0.034
Methoxychlor	0.000042	0.000050	0.000040
Silvex	0.0077	0.010	0.0010
Toxaphene	0.0010	0.0010	0.0010
2,4-D	0.036	0.059	0.028
	Metals (mg/l)		
Arsenic	0.0074	0.016	0.0050
Barium	0.51	1.0	0.22
Cadmium	0.010	0.030	0.0020
Chromium	0.090	0.28	0.010
Lead	0.0046	0.011	0.0040
Mercury	0.0051	0.025	0.0010
Nickel	5.2	18.	0.33
Selenium	0.0057	0.015	0.0050
Silver	0.010	0.010	0.010

C Pond Data
Summary of the data for the top six inches of the soil layer
except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	41500.	73000.	26000.
Arsenic	8.8	20.	5.0
Barium	115.	230.	61.
Beryllium	0.42	1.1	0.030
Boron	48.	89.	30.
Cadmium	0.49	0.84	0.30
Calcium	3877.	11000.	1100.
Chromium	42.	65.	22.
Cobalt	15.	26.	6.0
Copper	11.	32.	0.40
Iron	33111.	53000.	20000.
Lead	29.	43.	12.
Lithium	24.	33.	15.
Magnesium	4044.	7700.	2400.
Manganese	2325.	6500.	290.
Molybdenum	1.0	1.0	1.0
Nickel	45.	130.	14.
Niobium	0.70	0.70	0.70
Phosphorus	570.	920.	420.
Potassium	4583.	11000.	2000.
Selenium	5.0	5.0	5.0
Sodium	3292.	20000.	880.
Strontium	11.	17.	6.7
Thorium	20.	20.	20.
Titanium	258.	330.	180.
Vanadium	51.	72.	30.
Zinc	71.	84.	47.
	Radionuclides (dpm/g)*		
Cesium	15.	22.	15.
Neptunium	0.81	5.8	0.10
Plutonium	0.84	3.6	0.050
Technetium	90.	206.	55.
Uranium (ug/g)	25.	77.	7.0
U-235 (wt. %)	1.2	1.5	0.70
	Organics (ug/g)		
Acetone	0.12	0.29	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data

Summary of the data for the top six inches of the soil layer except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Freon-113	0.10	0.10	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.030	0.030
Other Halomethanes	0.10	0.10	0.10
PCB	0.0010	0.0010	0.0010
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.060	0.060	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Phosphate (Total) (ug/g)	1710.	2760.	1260.

C Pond Data
Summary of the leach test data
for the top six inches of the soil layer

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000066	0.000090	0.000050
Lindane	0.062	0.10	0.000020
Methoxychlor	0.000050	0.000070	0.000040
Silvex	0.0084	0.010	0.0040
Toxaphene	0.0012	0.0020	0.0010
2,4-D	0.036	0.050	0.030
	Metals (mg/l)		
Arsenic	0.0051	0.0070	0.0050
Barium	0.76	1.9	0.10
Cadmium	0.0021	0.0040	0.0020
Chromium	0.010	0.010	0.010
Lead	0.011	0.071	0.0040
Mercury	0.0011	0.0040	0.0010
Nickel	0.18	1.1	0.020
Selenium	0.0079	0.034	0.0050
Silver	0.010	0.010	0.010

C Pond Data

Summary of the data for the dirt from 6 to 12 inches from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	34545.	54000.	24000.
Arsenic	5.2	7.4	5.0
Barium	104.	170.	53.
Beryllium	0.26	0.81	0.030
Boron	41.	59.	24.
Cadmium	0.52	0.97	0.30
Calcium	6219.	35000.	370.
Chromium	61.	99.	27.
Cobalt	23.	77.	5.1
Copper	13.	47.	1.2
Iron	34545.	47000.	21000.
Lead	32.	55.	13.
Lithium	22.	33.	14.
Magnesium	5872.	23000.	2300.
Manganese	2237.	4200.	320.
Molybdenum	1.0	1.0	1.0
Nickel	89.	700.	16.
Niobium	0.70	0.70	0.70
Phosphorus	598.	1000.	380.
Potassium	3209.	6200.	1400.
Selenium	5.0	5.0	5.0
Sodium	2010.	3500.	870.
Strontium	10.	18.	6.0
Thorium	20.	29.	20.
Titanium	220.	320.	160.
Vanadium	47.	62.	30.
Zinc	64.	80.	46.
	Radionuclides (dpm/g)*		
Cesium	15.	15.	15.
Neptunium	0.20	0.20	0.20
Plutonium	0.20	0.20	0.20
Technetium	55.	55.	55.
Uranium (ug/g)	11.	24.	1.0
U-235 (wt. %)	1.2	1.6	0.92
	Organics (ug/g)		
Acetone	0.16	0.63	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data
Summary of the data for the dirt from 6 to 12 inches
from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Freon-113	0.10	0.10	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.030	0.030
Other Halomethanes	0.10	0.10	0.10
PCB	0.0010	0.0010	0.0010
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.060	0.060	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Phosphate (Total) (ug/g)	1794.	3000.	1140.

C Pond Data

Summary of the data for the dirt from 6 to 12 inches from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000063	0.000070	0.000050
Lindane	0.10	0.10	0.10
Methoxychlor	0.000046	0.000050	0.000040
Silvex	0.010	0.010	0.010
Toxaphene	0.0010	0.0010	0.0010
2,4-D	0.030	0.030	0.030
	Metals (mg/l)		
Arsenic	0.0050	0.0050	0.0050
Barium	0.43	0.90	0.10
Cadmium	0.0020	0.0030	0.0020
Chromium	0.010	0.010	0.010
Lead	0.0060	0.015	0.0040
Mercury	0.0010	0.0020	0.0010
Nickel	0.037	0.14	0.010
Selenium	0.0080	0.023	0.0050
Silver	0.010	0.010	0.010

C Pond Data
Summary of the data for the dirt from 12 to 13 inches
from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	304000.	39000.	20000.
Arsenic	5.0	5.0	5.0
Barium	84.	110.	54.
Beryllium	0.030	0.030	0.030
Boron	30.	38.	23.
Cadmium	0.30	0.30	0.30
Calcium	1094.	1600.	820.
Chromium	41.	65.	19.
Cobalt	15.	21.	11.
Copper	3.5	6.5	0.40
Iron	26000.	34000.	19000.
Lead	26.	34.	15.
Lithium	19.	25.	14.
Magnesium	2800.	3300.	2200.
Manganese	2074.	3200.	970.
Molybdenum	1.0	1.0	1.0
Nickel	24.	55.	12.
Niobium	0.70	0.70	0.70
Phosphorus	438.	540.	310.
Potassium	2420.	5100.	1500.
Selenium	5.0	5.0	5.0
Sodium	1822.	2900.	810.
Strontium	8.5	11.	5.2
Thorium	20.	20.	20.
Titanium	246.	310.	200.
Vanadium	43.	50.	38.
Zinc	54.	60.	39.
	Radionuclides (dpm/g)*		
Cesium	15.	15.	15.
Neptunium	0.20	0.20	0.20
Plutonium	0.10	0.10	0.10
Technetium	55.	55.	55.
Uranium (ug/g)	8.0	15.	1.0
U-235 (wt. %)	1.1	1.1	1.0
	Organics (ug/g)		
Acetone	0.21	0.68	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data
Summary of the data for the dirt from 12 to 18 inches
from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g)		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Freon-113	0.10	0.10	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.030	0.030
Other Halomethanes	0.10	0.10	0.10
PCB	0.0010	0.0010	0.0010
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.060	0.060	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Phosphate (Total) (ug/g)	1314.	1620.	930.

C Pond Data
Summary of the leach test data for the dirt from 12 to 18 inches from the top of the soil layer

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000070	0.000070	0.000070
Lindane	0.10	0.10	0.10
Methoxychlor	0.000050	0.000050	0.000050
Silvex	0.010	0.010	0.010
Toxaphene	0.0010	0.0010	0.0010
	Metals (mg/l)		
Arsenic	0.0054	0.0070	0.0050
Barium	0.30	0.57	0.11
Cadmium	0.0098	0.040	0.0020
Chromium	0.010	0.010	0.010
Lead	0.019	0.053	0.0040
Mercury	0.0020	0.0050	0.0010
Nickel	0.36	1.6	0.010
Selenium	0.011	0.022	0.0050
Silver	0.010	0.010	0.010

C Pond Data
Summary of the data for the dirt from 18 to 24 inches
from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	29000.	29000.	29000.
Arsenic	5.0	5.0	5.0
Barium	100.	100.	100.
Beryllium	0.030	0.030	0.030
Boron	40.	40.	40.
Cadmium	0.30	0.30	0.30
Calcium	1300.	1300.	1300.
Chromium	23.	23.	23.
Cobalt	11.	11.	11.
Copper	2.5	2.5	2.5
Iron	22000.	22000.	22000.
Lead	18.	18.	18.
Lithium	18.	18.	18.
Magnesium	2800.	2800.	2800.
Manganese	2200.	2200.	2200.
Molybdenum	1.0	1.0	1.0
Nickel	31.	31.	31.
Niobium	0.70	0.70	0.70
Phosphorus	500.	500.	500.
Potassium	1900.	1900.	1900.
Selenium	5.0	5.0	5.0
Sodium	2300.	2300.	2300.
Strontium	12.	12.	12.
Thorium	20.	20.	20.
Titanium	300.	300.	300.
Vanadium	40.	40.	40.
Zinc	63.	63.	63.
	Radionuclides (dpm/g)*		
Cesium	15.	15.	15.
Neptunium	2.3	2.3	2.3
Plutonium	1.4	1.4	1.4
Technetium	55.	55.	55.
Uranium (ug/g)	9.0	9.0	9.0
U-235 (wt. %)	1.1	1.1	1.1
	Organics		
PCB (ug/g)	0.0010	0.0010	0.0010
	Other analyses		
Phosphate (Total) (ug/g)	1500.	1500.	1500.

*Except where otherwise noted.

C Pond Data
Summary of the data for the dirt from 18 to 24 inches
from the top of the soil layer except the leach test

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000060	0.000060	0.000060
Lindane	0.10	0.10	0.10
Methoxychlor	0.000050	0.000050	0.000050
Silvex	0.010	0.010	0.010
Toxaphene	0.0010	0.0010	0.0010
2,4-D	0.030	0.030	0.030
	Metals (mg/l)		
Arsenic	0.0050	0.0050	0.0050
Barium	0.18	0.18	0.18
Cadmium	0.0020	0.0020	0.0020
Chromium	0.010	0.010	0.010
Lead	0.0040	0.0040	0.0040
Mercury	0.0020	0.0020	0.0020
Nickel	0.050	0.050	0.050
Selenium	0.0050	0.0050	0.0050
Silver	0.010	0.010	0.010

C Pond Data

Summary of data for the east end of C Pond except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	34736.	73000.	11000.
Arsenic	9.5	68.	5.0
Barium	81.	150.	13.
Beryllium	0.18	0.77	0.030
Boron	2026.	11000.	30.
Cadmium	0.60	1.8	0.30
Calcium	17591.	50000.	370.
Chromium	57.	94.	26.
Cobalt	15.	77.	2.0
Copper	60.	350.	4.5
Iron	28347.	53000.	2500.
Lead	27.	55.	6.4
Lithium	19.	31.	2.9
Magnesium	6015.	23000.	2200.
Manganese	954.	2900.	80.
Molybdenum	1.0	1.0	1.0
Nickel	168.	1200.	12.
Niobium	1.7	5.3	0.70
Phosphorus	579.	1000.	310.
Potassium	6278.	14000.	1400.
Selenium	5.4	13.	5.0
Sodium	6000.	20000.	1100.
Strontium	40.	130.	5.2
Thorium	29.	52.	20.
Titanium	277.	770.	110.
Vanadium	43.	72.	11.
Zinc	72.	110.	39.
	Radionuclides (dpm/g)*		
Cesium	15.	19.	15.
Neptunium	2.6	11.	0.10
Plutonium	1.8	5.9	0.050
Technetium	340.	997.	55.
Uranium (ug/g)	37.	109.	1.0
U-235 (wt. %)	1.4	2.6	0.98
	Organics (ug/g)		
Acetone	0.28	1.0	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data

Summary of data for the east end of C Pond except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chlororform	0.020	0.020	0.020
Cis-1,3-dichloropropane	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Freon-113	0.10	0.27	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.030	0.030
PCB	0.0010	0.0010	0.0010
Other Halomethanes	0.10	0.10	0.10
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.061	0.090	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Phosphate (Total) (ug/g)	1738.	3000.	930.
pH	11.	11.	9.2
Density @25C (g/ml)	1.4	1.7	1.1

C Pond Data

Summary of data for the east end of C Pond except the leach test

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000065	0.000090	0.000050
Lindane	0.085	0.10	0.000020
Methoxychlor	0.000050	0.000070	0.000040
Silvex	0.0097	0.010	0.0080
Toxaphene	0.0011	0.0020	0.0010
2,4-D	0.031	0.042	0.030
	Metals (mg/l)		
Arsenic	0.0052	0.0070	0.0050
Barium	0.45	1.9	0.10
Cadmium	0.0022	0.0040	0.0020
Chromium	0.010	0.010	0.010
Lead	0.0085	0.071	0.0040
Mercury	0.0026	0.025	0.0010
Nickel	0.51	1.8	0.010
Selenium	0.0081	0.034	0.0050
Silver	0.010	0.010	0.010

C Pond Data

Summary of data for the west end of C Pond except the leach test

parameter	mean	maximum	minimum
	Metals (ug/g)		
Aluminum	33109.	50000.	8500.
Arsenic	11.	97.	5.0
Barium	113.	230.	25.
Beryllium	0.24	1.1	0.030
Boron	708.	10000.	23.
Cadmium	0.46	0.97	0.30
Calcium	95648.	90000.	800.
Chromium	339.	2400.	19.
Cobalt	37.	210.	2.9
Copper	275.	2000.	0.40
Iron	31937.	73000.	3000.
Lead	38.	140.	6.0
Lithium	21.	33.	5.5
Magnesium	5078.	12000.	2300.
Manganese	2097.	6500.	73
Molybdenum	1.0	1.0	1.0
Nickel	2953.	21000.	12.
Niobium	0.97	4.4	0.70
Phosphorus	3029.	18000.	320.
Potassium	5175.	15000.	1500.
Selenium	5.1	11.	5.0
Sodium	2669.	9900.	740.
Strontium	43.	150.	6.6
Thorium	22.	52.	20.
Titanium	276.	430.	160.
Vanadium	39.	62.	14.
Zinc	145.	660.	47.
	Radionuclides (dpm/g)*		
Cesium	93.	511.	15.
Neptunium	.36	183.	0.20
Plutonium	52.	241.	0.10
Technetium	2617.	13600.	55.
Uranium (ug/g)	286.	1841.	3.0
U-235	1.2	1.6	0.70
	Organics (ug/g)		
Acetone	0.12	0.27	0.10
Benzene	0.040	0.040	0.040
Bromodichloromethane	0.020	0.020	0.020

*Except where otherwise noted.

C Pond Data

Summary of data for the west end of C Pond except the leach test

parameter	mean	maximum	minimum
	Organics (ug/g) cont.		
Bromoform	0.050	0.050	0.050
Carbon Tetrachloride	0.030	0.030	0.030
Chlorobenzene	0.060	0.060	0.060
Chloroform	0.020	0.020	0.020
Cis-1,3-dichloropropene	0.050	0.050	0.050
Dibromochloromethane	0.030	0.030	0.030
Ethyl Benzene	0.070	0.070	0.070
Freon-113	0.10	0.18	0.10
Freon-114	0.10	0.10	0.10
Freon-123	0.10	0.10	0.10
Methyl Ethyl Ketone(MEK)	0.10	0.10	0.10
Methylene Chloride	0.030	0.030	0.030
Other Halomethanes	0.10	0.10	0.10
PCB	0.0010	0.0010	0.0010
Permethylated Cyclosiloxane	2.4	2.4	2.4
Tetrachloroethylene	0.040	0.040	0.040
Toluene	0.060	0.060	0.060
Trans-1,2-dichloroethylene	0.020	0.020	0.020
Trans-1,3-dichloropropene	0.050	0.050	0.050
Trichloroethylene	0.020	0.020	0.020
Trichlorofluoromethane	0.10	0.10	0.10
Methyl Chloroform	0.040	0.040	0.040
1,1-dichloroethane	0.050	0.050	0.050
1,1-dichloroethylene	0.030	0.030	0.030
1,1,2-trichloroethane	0.050	0.050	0.050
1,1,2,2-tetrachloroethane	0.070	0.070	0.070
1,2-dichloroethane	0.030	0.030	0.030
1,2-dichloropropane	0.060	0.060	0.060
	Other analyses		
Density @25C (g/ml)	1.3	1.6	1.1
Phosphate (Total) (ug/g)	9089.	54000.	960.
pH	9.4	11.	8.1

C Pond Data

Summary of data for the west end of C Pond except the leach test

parameter	mean	maximum	minimum
	Pesticides (mg/l)		
Endrin	0.000058	0.000070	0.000050
Fluorocarbons	0.0030	0.0040	0.0020
Lindane	0.081	0.10	0.014
Methoxychlor	0.000045	0.000050	0.000040
Silvex	0.0081	0.010	0.0040
Toxaphene	0.0010	0.0010	0.0010
2,4-D	0.035	0.059	0.028
	Metals (mg/l)		
Arsenic	0.0060	0.016	0.0050
Barium	0.61	1.9	0.11
Cadmium	0.0069	0.040	0.0020
Chromium	0.043	0.28	0.010
Lead	0.0089	0.053	0.0040
Mercury	0.0040	0.032	0.0010
Nickel	2.4	18.	0.010
Selenium	0.0071	0.023	0.0050
Silver	0.010	0.010	0.010

APPENDIX B

Statistical Analyses Methods
(source: K-1407-B and K-1407-C Surface Impoundment False-Positive Groundwater Assessment, K/HS-214)

This Appendix gives arithmetic upper and lower bounds instead of an average whenever a below detection limit value entered the calculation of an average. The upper bound is the average using the detection limit. The lower bound is the average using a zero instead of the detection limit. Individual averages were first calculated for each of the following time periods: (1)-(4) the four quarterly base year samples, (5) the supplemental background sample, (6) the first semiannual sampling, (7) the two resamples, and (8) the assessment period. Then the "overall average" is an average of averages (1)-(8), the base year average is the average of averages (1)-(5), and the assessment period average is (8). For the average of averages, the lower bound was calculated using the lower bounds of the individual averages, and the upper bound used the upper bounds of the individual averages. When the lower and upper bounds are the same, no "less than" values were part of its calculation.

UNITS

Volatiles in ug/L

Metals in mg/L

Conductivity in umho/cm

Dissolved oxygen (D-O_2) in ppm

Activity in pCi/L

Total coliform bacteria in Ct/100 ml

Turbidity in NTU

Redox in mv

TOX in ug/L

Temperature in C^o

TOC in mg/L

pH is a unitless measurement

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
UNW-6								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	5	0	17.7000	17.7000	17.7000	17.7000	.	.
ALUMINUM	11	0	15.3292	15.3292	13.9200	13.9200	22.3750	22.3750
ALUMINUM-F	11	8	0.1649	0.1799	0.1940	0.2100	0.0192	0.0292
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	10	10	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ANTIMONY-F	10	10	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ARSENIC	11	8	0.0014	0.0053	0.0012	0.0052	0.0022	0.0060
ARSENIC-F	11	10	0.0008	0.0050	0.0010	0.0050	0.0000	0.0050
BARIUM	11	0	0.3458	0.3458	0.0450	0.0450	1.8500	1.8500
BARIUM-F	11	1	0.0553	0.0554	0.0068	0.0070	0.2975	0.2975
BENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	11	2	0.0022	0.0023	0.0021	0.0022	0.0030	0.0030
BERYLLIUM-F	11	11	0.0000	0.0003	0.0000	0.0003	0.0000	0.0003
BETA ACTIVITY	5	0	14.8500	14.8500	14.8500	14.8500	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BORON	11	2	0.0202	0.0210	0.0164	0.0172	0.0391	0.0396
BORON-F	11	5	0.0114	0.0131	0.0117	0.0133	0.0101	0.0121
BROMODICHLOROMETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	5	4	0.2500	4.0000	0.2500	4.0000	.	.
BROMOMETHANE	5	4	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	11	8	0.0004	0.0031	0.0000	0.0030	0.0024	0.0039
CADMIUM-F	11	9	0.0003	0.0031	0.0000	0.0030	0.0020	0.0035
CALCIUM	11	0	64.4792	64.4792	65.8000	65.8000	57.8750	57.8750
CALCIUM-F	11	0	63.7292	63.7292	64.7000	64.7000	58.8750	58.8750
CARBON DISULFIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	13	0	2.6518	2.6518	2.6375	2.6375	2.8125	2.8125
CHLOROBENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	5	5	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

	OVERALL				BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
CHLOROFORM	5	4	1.0000	4.7500	1.0000	4.7500	.	.
CHLOROMETHANE	5	4	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	11	7	0.0087	0.0157	0.0022	0.0102	0.0410	0.0435
CHROMIUM-F	11	10	0.0007	0.0102	0.0000	0.0100	0.0040	0.0115
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	11	4	0.0090	0.0115	0.0083	0.0113	0.0127	0.0127
COBALT-F	11	11	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
CONDUCTIVITY	62	0	327.9976	327.9976	353.8711	353.8711	327.8250	327.8250
COPPER	11	2	0.0197	0.0210	0.0166	0.0182	0.0352	0.0352
COPPER-F	11	11	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
D-02	5	0	7.3750	7.3750	7.3750	7.3750	.	.
DI-N-BUTYLPHTHALATE	1	0	4.0000	4.0000	4.0000	4.0000	.	.
DI-N-OCTYLPHTHALATE	1	0	0.2000	0.2000	0.2000	0.2000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	8	0	6.3250	6.3250	.	.	8.8250	8.8250
ENDRIN	5	5	0.0000	0.0750	0.0000	0.0750	.	.
ETHYLBENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	10	0	0.2081	0.2081	0.1632	0.1632	0.3875	0.3875
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	14	0	33.2187	33.2187	23.3200	23.3200	27.6500	27.6500
IRON-F	14	1	0.1492	0.1497	0.1696	0.1704	0.0381	0.0381
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	10	1	0.0700	0.0708	0.0709	0.0719	0.0667	0.0667
LEAD-F	10	10	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
LINDANE	5	5	0.0000	0.0150	0.0000	0.0150	.	.
LITHIUM	11	5	0.0097	0.0117	0.0073	0.0097	0.0216	0.0221
LITHIUM-F	11	11	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
MAGNESIUM	11	0	9.3937	9.3937	9.6300	9.6300	8.2125	8.2125
MAGNESIUM-F	11	0	8.4875	8.4875	8.6800	8.6800	7.5250	7.5250
MANGANESE	14	0	1.2033	1.2033	0.9288	0.9288	0.8325	0.8325
MANGANESE-F	14	1	0.0435	0.0436	0.0252	0.0254	0.0278	0.0278
MERCURY	11	8	0.0002	0.0003	0.0001	0.0002	0.0006	0.0007
MERCURY-F	11	11	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
METHOXYCHLOR	5	5	0.0000	0.0600	0.0000	0.0600	.	.
METHYLENE CHLORIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
MOLYBDENUM	11	11	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
MOLYBDENUM-F	11	10	0.0012	0.0103	0.0014	0.0104	0.0000	0.0100
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	11	4	0.0160	0.0210	0.0122	0.0182	0.0351	0.0351
NICKEL-F	11	10	0.0018	0.0102	0.0022	0.0102	0.0000	0.0100
NIOBIUM	11	10	0.0005	0.0072	0.0000	0.0070	0.0030	0.0082
NIOBIUM-F	11	10	0.0005	0.0072	0.0000	0.0070	0.0030	0.0082
NITRATE NITROGEN	11	0	0.3567	0.3567	0.2960	0.2960	0.6600	0.6600
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	44	0	7.3869	7.3869	7.4760	7.4760	7.3950	7.3950
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	9	6	0.0010	0.0018	0.0007	0.0015	.	.
PHOSPHORUS	11	7	0.4554	0.5471	0.5300	0.6100	0.0825	0.2325
PHOSPHORUS-F	11	11	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
POTASSIUM	11	0	4.5812	4.5812	3.9500	3.9500	7.7375	7.7375
POTASSIUM-F	11	0	2.2404	2.2404	1.7760	1.7760	4.5625	4.5625
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	13	0	259.4786	259.4786	256.9000	256.9000	288.2500	288.2500
SELENIUM	11	11	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SELENIUM-F	11	11	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SILICON	11	0	16.2208	16.2208	17.0900	17.0900	11.8750	11.8750
SILICON-F	11	0	3.5896	3.5896	3.7000	3.7000	3.0375	3.0375
SILVER	11	11	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVER-F	11	11	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVEX	6	6	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	14	0	1.6177	1.6177	1.5600	1.5600	1.5412	1.5412
SODIUM-F	14	0	1.5625	1.5625	1.6200	1.6200	1.5000	1.5000
STRONTIUM	11	0	0.0511	0.0511	0.0457	0.0457	0.0779	0.0779
STRONTIUM-F	11	0	0.0438	0.0438	0.0428	0.0428	0.0490	0.0490
STYRENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	14	0	5.4578	5.4578	6.1400	6.1400	5.1125	5.1125
TEMPERATURE	13	0	16.7321	16.7321	17.9500	17.9500	11.2750	11.2750
TETRACHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
THALLIUM	11	11	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THALLIUM-F	11	11	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THORIUM	11	11	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
THORIUM-F	11	11	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
TITANIUM	11	0	0.1753	0.1753	0.1801	0.1801	0.1512	0.1512

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
TITANIUM-F	11	5	0.0062	0.0073	0.0067	0.0079	0.0034	0.0045
TOLUENE	5	4	0.2500	4.0000	0.2500	4.0000	.	.
TOTAL COLIFORM BACTERIA	1	0	1.0000	1.0000	1.0000	1.0000	.	.
TOTAL ORGANIC CARBON (TOC)	25	4	39.1584	39.2298	54.4043	54.4043	.	.
TOTAL XYLENES	5	5	0.0000	5.0000	0.0000	5.0000	.	.
TOX	25	2	62.9750	65.1179	85.0900	86.0900	.	.
TOXAPHENE	6	6	0.0000	1.4000	0.0000	1.4000	.	.
TRANS-1,2-DICHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
TRANS-1,3-DICHLOROPROPENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
TURBIDITY	5	0	184.2500	184.2500	184.2500	184.2500	.	.
URANIUM	9	2	0.0035	0.0038	0.0039	0.0041	.	.
URANIUM-F	9	2	0.0044	0.0046	0.0060	0.0060	.	.
VANADIUM	11	2	0.0312	0.0329	0.0292	0.0312	0.0414	0.0414
VANADIUM-F	11	11	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
VINYL ACETATE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	5	4	0.0000	10.0000	0.0000	10.0000	.	.
ZINC	11	0	0.2310	0.2310	0.2420	0.2420	0.1761	0.1761
ZINC-F	11	1	0.0297	0.0298	0.0310	0.0310	0.0236	0.0238
ZIRCONIUM	11	6	0.0053	0.0078	0.0052	0.0077	0.0057	0.0082
ZIRCONIUM-F	11	10	0.0006	0.0052	0.0008	0.0053	0.0000	0.0050
1,1-DICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,1-TRICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,2-DICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	6	6	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
UNW-7								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	5	1	23.6125	23.8625	23.6125	23.8625	.	.
ALUMINUM	10	0	1.6464	1.6464	1.4160	1.4160	2.7982	2.7982
ALUMINUM-F	10	4	0.2061	0.2161	0.0626	0.0746	0.9235	0.9235
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	8	8	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ANTIMONY-F	8	8	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ARSENIC	10	3	0.0042	0.0063	0.0036	0.0061	0.0072	0.0072
ARSENIC-F	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
BARIUM	10	0	0.1354	0.1354	0.1320	0.1320	0.1525	0.1525
BARIUM-F	10	0	0.1279	0.1279	0.1260	0.1260	0.1375	0.1375
BENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	10	9	0.0000	0.0003	0.0000	0.0003	0.0001	0.0003
BERYLLIUM-F	10	10	0.0000	0.0003	0.0000	0.0003	0.0000	0.0003
BETA ACTIVITY	5	0	80.2000	80.2000	80.2000	80.2000	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BORON	10	1	0.0390	0.0392	0.0398	0.0398	0.0352	0.0362
BORON-F	10	1	0.0341	0.0343	0.0370	0.0370	0.0198	0.0208
BROMODICHLOROMETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	5	5	0.0000	5.0000	0.0000	5.0000	.	.
BROMOMETHANE	5	3	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	10	9	0.0002	0.0031	0.0000	0.0030	0.0014	0.0036
CADMIUM-F	10	9	0.0001	0.0030	0.0000	0.0030	0.0008	0.0030
CALCIUM	10	0	102.0833	102.0833	103.7000	103.7000	94.0000	94.0000
CALCIUM-F	10	0	101.7500	101.7500	103.6000	103.6000	92.5000	92.5000
CARBON DISULFIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	12	0	226.8571	226.8571	220.3750	220.3750	212.5000	212.5000
CHLOROBENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
CHLOROFORM	5	4	0.5000	4.2500	0.5000	4.2500	.	.
CHLOROMETHANE	5	3	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	10	8	0.0010	0.0102	0.0000	0.0100	0.0060	0.0110
CHROMIUM-F	10	9	0.0005	0.0100	0.0000	0.0100	0.0027	0.0102
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	10	0	0.0115	0.0115	0.0118	0.0118	0.0100	0.0100
COBALT-F	10	2	0.0089	0.0097	0.0090	0.0100	0.0085	0.0085
CONDUCTIVITY	50	0	1585.98	1585.98	1441.07	1441.07	1795.5	1795.5
COPPER	10	8	0.0007	0.0042	0.0007	0.0043	0.0011	0.0041
COPPER-F	10	10	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
D-02	5	0	4.2500	4.2500	4.2500	4.2500	.	.
DI-N-BUTYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DI-N-OCTYLPHTHALATE	1	0	0.5000	0.5000	0.5000	0.5000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	7	0	3.9667	3.9667	.	.	4.3000	4.3000
ENDRIN	5	5	0.0000	0.0750	0.0000	0.0750	.	.
ETHYLBENZENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	9	0	0.1104	0.1104	0.0942	0.0942	0.1750	0.1750
FREON 123	3	0	8.2500	8.2500	8.2500	8.2500	.	.
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

	OVERALL				BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	13	0	3.7244	3.7244	3.4600	3.4600	6.2950	6.2950
IRON-F	13	0	1.0365	1.0365	0.7190	0.7190	2.7297	2.7297
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	9	4	0.0024	0.0048	0.0010	0.0040	0.0082	0.0082
LEAD-F	9	6	0.0016	0.0044	0.0010	0.0040	0.0040	0.0060
LINDANE	5	5	0.0000	0.0150	0.0000	0.0150	.	.
LITHIUM	10	8	0.0004	0.0040	0.0000	0.0040	0.0021	0.0041
LITHIUM-F	10	10	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
MAGNESIUM	10	0	17.4583	17.4583	17.8000	17.8000	15.7500	15.7500
MAGNESIUM-F	10	0	17.0417	17.0417	17.4000	17.4000	15.2500	15.2500
MANGANESE	13	0	8.8594	8.8594	9.4300	9.4300	7.5250	7.5250
MANGANESE-F	13	0	8.6844	8.6844	9.2600	9.2600	7.3250	7.3250
MERCURY	10	10	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002
MERCURY-F	10	10	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002
METHOXYCHLOR	5	5	0.0000	0.0600	0.0000	0.0600	.	.
METHYLENE CHLORIDE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
MOLYBDENUM	10	10	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
MOLYBDENUM-F	10	10	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	10	6	0.0039	0.0110	0.0024	0.0104	0.0115	0.0140
NICKEL-F	10	8	0.0023	0.0102	0.0022	0.0102	0.0027	0.0102
NIOBIUM	10	9	0.0005	0.0072	0.0000	0.0070	0.0032	0.0085
NIOBIUM-F	10	10	0.0000	0.0070	0.0000	0.0070	0.0000	0.0070
NITRATE NITROGEN	10	10	0.0000	0.1750	0.0000	0.1880	0.0000	0.1100
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	37	0	6.7352	6.7352	6.6433	6.6433	6.9850	6.9850
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	9	1	0.0032	0.0034	0.0034	0.0036	.	.
PHOSPHORUS	10	8	0.0900	0.2233	0.1080	0.2280	0.0000	0.2000
PHOSPHORUS-F	10	8	0.0950	0.2283	0.1140	0.2340	0.0000	0.2000
POTASSIUM	10	0	3.3917	3.3917	2.9800	2.9800	5.4500	5.4500
POTASSIUM-F	10	0	3.0333	3.0333	2.5200	2.5200	5.6000	5.6000
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	12	0	123.3857	123.3857	117.7250	117.7250	113.7500	113.7500
SELENIUM	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SELENIUM-F	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SILICON	10	0	5.4333	5.4333	5.2500	5.2500	6.3500	6.3500

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
SILICON-F	10	0	3.3208	3.3208	3.2200	3.2200	3.8250	3.8250
SILVER	10	10	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVER-F	10	10	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVEX	6	6	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	13	0	255.0000	255.0000	221.0000	221.0000	320.0000	320.0000
SODIUM-F	13	0	254.0625	254.0625	219.0000	219.0000	322.5000	322.5000
STRONTIUM	10	0	0.1617	0.1617	0.1620	0.1620	0.1600	0.1600
STRONTIUM-F	10	0	0.1608	0.1608	0.1620	0.1620	0.1550	0.1550
STYRENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	13	0	100.0313	100.0313	80.8000	80.8000	147.7500	147.7500
TEMPERATURE	12	0	18.2286	18.2286	18.7250	18.7250	16.9000	16.9000
TETRACHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
THALLIUM	10	10	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THALLIUM-F	10	10	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THORIUM	10	10	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
THORIUM-F	10	10	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
TITANIUM	10	2	0.0403	0.0409	0.0413	0.0419	0.0352	0.0360
TITANIUM-F	10	6	0.0062	0.0076	0.0052	0.0064	0.0115	0.0137
TOLUENE	5	4	0.2500	4.0000	0.2500	4.0000	.	.
TOTAL COLIFORM BACTERIA	2	0	7.5000	7.5000	7.5000	7.5000	.	.
TOTAL ORGANIC CARBON (TOC)	22	0	135.0786	135.0786	187.6800	187.6800	.	.
TOTAL XYLENES	5	4	0.2500	4.0000	0.2500	4.0000	.	.
TOX	27	0	1050.65	1050.65	1447.52	1447.52	.	.
TOXAPHENE	6	6	0.0000	1.4000	0.0000	1.4000	.	.
TRANS-1,2-DICHLOROETHENE	5	2	3.2500	5.7500	3.2500	5.7500	.	.
TRANS-1,3-DICHLOROPROPENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	5	4	0.5000	4.2500	0.5000	4.2500	.	.
TURBIDITY	5	0	43.1250	43.1250	43.1250	43.1250	.	.
URANIUM	9	0	0.0054	0.0054	0.0053	0.0053	.	.
URANIUM-F	9	1	0.0072	0.0073	0.0075	0.0076	.	.
VANADIUM	10	9	0.0003	0.0051	0.0000	0.0050	0.0016	0.0054
VANADIUM-F	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
VINYL ACETATE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	5	3	0.0000	10.0000	0.0000	10.0000	.	.
ZINC	10	2	0.0165	0.0166	0.0192	0.0192	0.0028	0.0033
ZINC-F	10	3	0.0187	0.0189	0.0211	0.0212	0.0065	0.0070
ZIRCONIUM	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
ZIRCONIUM-F	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
1,1-DICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,1-TRICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

	OVERALL				BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
1,2-DICHLOROETHANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	5	5	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	6	6	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	5	5	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
UNW-8								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	4	1	24.0000	24.2500	24.0000	24.2500	.	.
ALUMINUM	5	0	7.8360	7.8360	7.8360	7.8360	.	.
ALUMINUM-F	5	3	0.0338	0.0458	0.0338	0.0458	.	.
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	4	4	0.0000	0.0500	0.0000	0.0500	.	.
ANTIMONY-F	4	4	0.0000	0.0500	0.0000	0.0500	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
ARSENIC	5	4	0.0016	0.0056	0.0016	0.0056	.	.
ARSENIC-F	5	4	0.0012	0.0052	0.0012	0.0052	.	.
BARIUM	5	0	0.0784	0.0784	0.0784	0.0784	.	.
BARIUM-F	5	0	0.0446	0.0446	0.0446	0.0446	.	.
BENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	5	4	0.0001	0.0003	0.0001	0.0003	.	.
BERYLLIUM-F	5	5	0.0000	0.0003	0.0000	0.0003	.	.
BETA ACTIVITY	4	0	50.0700	50.0700	50.0700	50.0700	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	0	2.0000	2.0000	2.0000	2.0000	.	.
BORON	5	0	0.0366	0.0366	0.0366	0.0366	.	.
BORON-F	5	1	0.0161	0.0169	0.0161	0.0169	.	.
BROMODICHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	5	4	0.0009	0.0033	0.0009	0.0033	.	.
CADMIUM-F	5	5	0.0000	0.0030	0.0000	0.0030	.	.
CALCIUM	5	0	78.0000	78.0000	78.0000	78.0000	.	.
CALCIUM-F	5	0	75.0000	75.0000	75.0000	75.0000	.	.
CARBON DISULFIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	7	0	32.6500	32.6500	34.2500	34.2500	.	.
CHLOROBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
CHLOROFORM	4	2	2.2500	4.7500	2.2500	4.7500	.	.
CHLOROMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	5	4	0.0054	0.0134	0.0054	0.0134	.	.
CHROMIUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	5	3	0.0044	0.0074	0.0044	0.0074	.	.
COBALT-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
CONDUCTIVITY	31	0	413.1500	413.1500	442.8600	442.8600	.	.
COPPER	5	5	0.0000	0.0040	0.0000	0.0040	.	.
COPPER-F	5	5	0.0000	0.0040	0.0000	0.0040	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

	OVERALL				BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
D-02	4	0	5.1500	5.1500	5.1500	5.1500	.	.
DI-N-BUTYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DI-N-OCTYLPHTHALATE	1	0	0.2000	0.2000	0.2000	0.2000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	3	0	2.6250	2.6250	.	.	.	.
ENDRIN	4	3	0.0000	0.0833	0.0000	0.0833	.	.
ETHYLBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	4	1	0.0657	0.0907	0.0657	0.0907	.	.
FREON 113	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FREON 123	2	0	17.0000	17.0000	17.0000	17.0000	.	.
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	8	0	8.2271	8.2271	9.2480	9.2480	.	.
IRON-F	8	2	0.0388	0.0399	0.0414	0.0430	.	.
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	4	0	0.0265	0.0265	0.0265	0.0265	.	.
LEAD-F	4	4	0.0000	0.0040	0.0000	0.0040	.	.
LINDANE	4	3	0.0000	0.0167	0.0000	0.0167	.	.
LITHIUM	5	3	0.0028	0.0052	0.0028	0.0052	.	.
LITHIUM-F	5	5	0.0000	0.0040	0.0000	0.0040	.	.
MAGNESIUM	5	0	7.1200	7.1200	7.1200	7.1200	.	.
MAGNESIUM-F	5	0	5.4400	5.4400	5.4400	5.4400	.	.
MANGANESE	8	0	0.3156	0.3156	0.3198	0.3198	.	.
MANGANESE-F	8	0	0.0704	0.0704	0.0456	0.0456	.	.
MERCURY	5	5	0.0000	0.0002	0.0000	0.0002	.	.
MERCURY-F	5	5	0.0000	0.0002	0.0000	0.0002	.	.
METHOXYCHLOR	4	3	0.0000	0.0667	0.0000	0.0667	.	.
METHYLENE CHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
MOLYBDENUM	5	5	0.0000	0.0100	0.0000	0.0100	.	.
MOLYBDENUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	5	3	0.0132	0.0192	0.0132	0.0192	.	.
NICKEL-F	5	4	0.0040	0.0120	0.0040	0.0120	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
NIOBIUM	5	5	0.0000	0.0070	0.0000	0.0070	.	.
NIOBIUM-F	5	5	0.0000	0.0070	0.0000	0.0070	.	.
NITRATE NITROGEN	5	5	0.0000	0.1100	0.0000	0.1100	.	.
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	24	0	6.5829	6.5829	6.7000	6.7000	.	.
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	8	5	0.0026	0.0033	0.0030	0.0036	.	.
PHOSPHORUS	5	3	0.1580	0.2780	0.1580	0.2780	.	.
PHOSPHORUS-F	5	5	0.0000	0.2000	0.0000	0.2000	.	.
POTASSIUM	5	0	8.7000	8.7000	8.7000	8.7000	.	.
POTASSIUM-F	5	0	4.1800	4.1800	4.1800	4.1800	.	.
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	7	0	307.4000	307.4000	316.0000	316.0000	.	.
SELENIUM	5	5	0.0000	0.0050	0.0000	0.0050	.	.
SELENIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
SILICON	5	0	17.5200	17.5200	17.5200	17.5200	.	.
SILICON-F	5	0	6.4000	6.4000	6.4000	6.4000	.	.
SILVER	5	5	0.0000	0.0060	0.0000	0.0060	.	.
SILVER-F	5	5	0.0000	0.0060	0.0000	0.0060	.	.
SILVEX	5	5	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	8	0	6.7643	6.7643	5.8600	5.8600	.	.
SODIUM-F	8	0	6.9071	6.9071	5.6600	5.6600	.	.
STRONTIUM	5	0	0.0886	0.0886	0.0886	0.0886	.	.
STRONTIUM-F	5	0	0.0838	0.0838	0.0838	0.0838	.	.
STYRENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	8	0	8.7857	8.7857	8.6800	8.6800	.	.
TEMPERATURE	7	0	17.1500	17.1500	16.9000	16.9000	.	.
TETRACHLOROETHENE	4	2	3.0000	5.5000	3.0000	5.5000	.	.
THALLIUM	5	4	0.0020	0.0100	0.0020	0.0100	.	.
THALLIUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
THORIUM	5	5	0.0000	0.2000	0.0000	0.2000	.	.
THORIUM-F	5	5	0.0000	0.2000	0.0000	0.2000	.	.
TITANIUM	5	0	0.1652	0.1652	0.1652	0.1652	.	.
TITANIUM-F	5	4	0.0028	0.0052	0.0028	0.0052	.	.
TOLUENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TOTAL ORGANIC CARBON (TOC)	19	4	78.0256	78.0970	108.6333	108.6333	.	.
TOTAL XYLENES	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TOX	25	0	165.3571	165.3571	219.4000	219.4000	.	.
TOXAPHENE	5	4	0.0000	1.5000	0.0000	1.5000	.	.
TRANS-1,2-DICHLOROETHENE	4	3	1.0000	4.7500	1.0000	4.7500	.	.
TRANS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	4	0	26.2500	26.2500	26.2500	26.2500	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
TURBIDITY	4	0	151.7500	151.7500	151.7500	151.7500	.	.
URANIUM	8	5	0.0011	0.0017	0.0016	0.0020	.	.
URANIUM-F	8	5	0.0048	0.0054	0.0064	0.0070	.	.
VANADIUM	5	4	0.0036	0.0076	0.0036	0.0076	.	.
VANADIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
VINYL ACETATE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
ZINC	5	0	0.0308	0.0308	0.0308	0.0308	.	.
ZINC-F	5	1	0.0149	0.0151	0.0149	0.0151	.	.
ZIRCONIUM	5	5	0.0000	0.0050	0.0000	0.0050	.	.
ZIRCONIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
1,1-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,1-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,2-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	5	5	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
UMW-9								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	4	1	7.7500	8.5000	7.7500	8.5000	.	.
ALUMINUM	9	0	10.7575	10.7575	2.8740	2.8740	50.1750	50.1750
ALUMINUM-F	9	3	0.0474	0.0574	0.0502	0.0622	0.0335	0.0335
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	8	8	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ANTIMONY-F	8	8	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ARSENIC	9	3	0.0045	0.0064	0.0042	0.0062	0.0060	0.0072
ARSENIC-F	9	5	0.0016	0.0052	0.0012	0.0052	0.0037	0.0050
BARIUM	9	0	0.1821	0.1821	0.1540	0.1540	0.3225	0.3225
BARIUM-F	9	0	0.1361	0.1361	0.1480	0.1480	0.0767	0.0767
BENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	9	5	0.0005	0.0007	0.0000	0.0003	0.0028	0.0028
BERYLLIUM-F	9	9	0.0000	0.0003	0.0000	0.0003	0.0000	0.0003
BETA ACTIVITY	4	0	13.6500	13.6500	13.6500	13.6500	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BORON	9	0	0.0627	0.0627	0.0492	0.0492	0.1305	0.1305
BORON-F	9	0	0.0282	0.0282	0.0308	0.0308	0.0155	0.0155
BROMODICHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	9	5	0.0014	0.0035	0.0010	0.0034	0.0032	0.0040
CADMIUM-F	9	7	0.0013	0.0036	0.0012	0.0036	0.0013	0.0036
CALCIUM	9	0	159.1667	159.1667	160.0000	160.0000	155.0000	155.0000

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
CALCIUM-F	9	0	160.8333	160.8333	164.0000	164.0000	145.0000	145.0000
CARBON DISULFIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	11	0	178.7500	178.7500	201.7500	201.7500	141.2500	141.2500
CHLOROBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
CHLOROFORM	4	2	2.0000	4.5000	2.0000	4.5000	.	.
CHLOROMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	9	6	0.0114	0.0201	0.0000	0.0100	0.0682	0.0707
CHROMIUM-F	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	9	0	0.0621	0.0621	0.0540	0.0540	0.1027	0.1027
COBALT-F	9	0	0.0530	0.0530	0.0512	0.0512	0.0622	0.0622
CONDUCTIVITY	52	0	1363.17	1363.17	1350.92	1350.92	1339.25	1339.25
COPPER	9	5	0.0064	0.0097	0.0000	0.0040	0.0383	0.0383
COPPER-F	9	9	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
D-02	4	0	8.6750	8.6750	8.6750	8.6750	.	.
DI-N-BUTYLPHTHALATE	1	0	5.0000	5.0000	5.0000	5.0000	.	.
DI-N-OCTYLPHTHALATE	1	0	0.1000	0.1000	0.1000	0.1000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	0	1.0000	1.0000	1.0000	1.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	7	0	2.2083	2.2083	.	.	4.1250	4.1250
ENDRIN	4	4	0.0000	0.0750	0.0000	0.0750	.	.
ETHYLBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	8	1	0.0732	0.0932	0.0665	0.0915	0.1000	0.1000
FREON 123	2	0	15.5000	15.5000	15.5000	15.5000	.	.
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	12	0	23.8438	23.8438	15.6000	15.6000	69.7500	69.7500
IRON-F	12	1	9.4009	9.4012	9.9000	9.9000	5.2075	5.2075
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	8	0	0.0225	0.0225	0.0192	0.0192	0.0357	0.0357
LEAD-F	8	7	0.0010	0.0042	0.0012	0.0042	0.0000	0.0040
LINDANE	4	4	0.0000	0.0150	0.0000	0.0150	.	.
LITHIUM	9	6	0.0050	0.0085	0.0000	0.0040	0.0302	0.0312

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
LITHIUM-F	9	9	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
MAGNESIUM	9	0	21.5833	21.5833	21.2000	21.2000	23.5000	23.5000
MAGNESIUM-F	9	0	20.9167	20.9167	21.2000	21.2000	19.5000	19.5000
MANGANESE	12	0	21.8750	21.8750	20.2000	20.2000	24.5000	24.5000
MANGANESE-F	12	0	21.0281	21.0281	20.2000	20.2000	18.7250	18.7250
MERCURY	9	7	0.0000	0.0002	0.0000	0.0002	0.0002	0.0003
MERCURY-F	9	8	0.0000	0.0002	0.0000	0.0002	0.0000	0.0002
METHOXYCHLOR	4	4	0.0000	0.0600	0.0000	0.0600	.	.
METHYLENE CHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
MOLYBDENUM	9	8	0.0005	0.0101	0.0000	0.0100	0.0030	0.0105
MOLYBDENUM-F	9	8	0.0028	0.0112	0.0034	0.0114	0.0000	0.0100
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	9	4	0.0115	0.0182	0.0026	0.0106	0.0562	0.0562
NICKEL-F	9	5	0.0037	0.0108	0.0026	0.0106	0.0092	0.0117
NIOBIUM	9	9	0.0000	0.0070	0.0000	0.0070	0.0000	0.0070
NIOBIUM-F	9	8	0.0013	0.0071	0.0015	0.0071	0.0000	0.0070
NITRATE NITROGEN	9	9	0.0000	0.1100	0.0000	0.1100	0.0000	0.1100
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	40	0	7.0098	7.0098	7.3267	7.3267	6.5450	6.5450
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	8	1	0.0061	0.0061	0.0070	0.0070	.	.
PHOSPHORUS	9	7	0.1117	0.2450	0.1340	0.2540	0.0000	0.2000
PHOSPHORUS-F	9	7	0.0833	0.2167	0.1000	0.2200	0.0000	0.2000
POTASSIUM	9	0	8.1917	8.1917	6.4800	6.4800	16.7500	16.7500
POTASSIUM-F	9	0	6.0708	6.0708	5.8800	5.8800	7.0250	7.0250
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	11	0	70.6786	70.6786	63.1750	63.1750	102.6500	102.6500
SELENIUM	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SELENIUM-F	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SILICON	9	0	9.9500	9.9500	7.6800	7.6800	21.3000	21.3000
SILICON-F	9	0	3.8625	3.8625	3.9000	3.9000	3.6750	3.6750
SILVER	9	9	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVER-F	9	9	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVEX	5	5	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	12	0	95.0000	95.0000	96.2000	96.2000	90.5000	90.5000
SODIUM-F	12	0	95.7500	95.7500	97.6000	97.6000	89.5000	89.5000
STRONTIUM	9	0	0.2387	0.2387	0.2380	0.2380	0.2425	0.2425
STRONTIUM-F	9	0	0.2404	0.2404	0.2440	0.2440	0.2225	0.2225
STYRENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	12	0	163.9375	163.9375	120.6000	120.6000	260.5000	260.5000

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
TEMPERATURE	11	0	17.5893	17.5893	17.6250	17.6250	17.6250	17.6250
TETRACHLOROETHENE	4	3	2.2500	6.0000	2.2500	6.0000	.	.
THALLIUM	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THALLIUM-F	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THORIUM	9	9	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
THORIUM-F	9	9	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
TITANIUM	9	1	0.1193	0.1198	0.0692	0.0698	0.3700	0.3700
TITANIUM-F	9	6	0.0036	0.0055	0.0042	0.0060	0.0009	0.0031
TOLUENE	4	3	0.2500	4.0000	0.2500	4.0000	.	.
TOTAL ORGANIC CARBON (TOC)	23	2	109.6625	109.6982	152.6200	152.6200	.	.
TOTAL XYLENES	4	3	0.2500	4.0000	0.2500	4.0000	.	.
TOX	23	1	424.1310	424.6071	584.4000	584.4000	.	.
TOXAPHENE	5	5	0.0000	1.4000	0.0000	1.4000	.	.
TRANS-1,2-DICHLOROETHENE	4	0	35.2500	35.2500	35.2500	35.2500	.	.
TRANS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TURBIDITY	4	0	162.0000	162.0000	162.0000	162.0000	.	.
URANIUM	8	6	0.0014	0.0021	0.0020	0.0026	.	.
URANIUM-F	8	2	0.0032	0.0035	0.0042	0.0044	.	.
VANADIUM	9	6	0.0089	0.0133	0.0000	0.0050	0.0535	0.0547
VANADIUM-F	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
VINYL ACETATE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	4	1	12.6667	16.0000	12.6667	16.0000	.	.
ZINC	9	0	0.0487	0.0487	0.0221	0.0221	0.1820	0.1820
ZINC-F	9	1	0.0237	0.0238	0.0272	0.0272	0.0063	0.0066
ZIRCONIUM	9	7	0.0015	0.0060	0.0000	0.0050	0.0087	0.0112
ZIRCONIUM-F	9	8	0.0012	0.0054	0.0015	0.0055	0.0000	0.0050
1,1-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,1-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,2-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	5	5	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
UNW-10								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	4	1	6.9750	7.7250	6.9750	7.7250	.	.
ALUMINUM	9	0	7.8125	7.8125	6.3800	6.3800	14.9750	14.9750
ALUMINUM-F	9	4	0.0417	0.0501	0.0446	0.0526	0.0275	0.0375
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	8	7	0.0065	0.0540	0.0000	0.0500	0.0325	0.0700
ANTIMONY-F	8	8	0.0000	0.0500	0.0000	0.0500	0.0000	0.0500
ARSENIC	9	6	0.0032	0.0063	0.0034	0.0064	0.0022	0.0060
ARSENIC-F	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
BARIUM	9	0	0.2354	0.2354	0.1660	0.1660	0.5825	0.5825
BARIUM-F	9	0	0.1925	0.1925	0.1360	0.1360	0.4750	0.4750
BENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	9	5	0.0002	0.0004	0.0001	0.0003	0.0009	0.0010
BERYLLIUM-F	9	8	0.0000	0.0003	0.0000	0.0003	0.0001	0.0003
BETA ACTIVITY	4	1	8.6000	10.3500	8.6000	10.3500	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BORON	9	0	0.0674	0.0674	0.0657	0.0657	0.0762	0.0762
BORON-F	9	0	0.0395	0.0395	0.0414	0.0414	0.0300	0.0300
BROMODICHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	9	7	0.0003	0.0030	0.0000	0.0030	0.0015	0.0030
CADMIUM-F	9	9	0.0000	0.0030	0.0000	0.0030	0.0000	0.0030
CALCIUM	9	0	129.5833	129.5833	132.0000	132.0000	117.5000	117.5000
CALCIUM-F	9	0	126.6667	126.6667	128.0000	128.0000	120.0000	120.0000
CARBON DISULFIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	12	0	26.9750	26.9750	37.0000	37.0000	18.1750	18.1750
CHLOROBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
CHLOROFORM	4	3	0.5000	4.2500	0.5000	4.2500	.	.
CHLOROMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	9	5	0.0072	0.0142	0.0036	0.0116	0.0250	0.0275
CHROMIUM-F	9	7	0.0028	0.0107	0.0024	0.0104	0.0047	0.0122
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	9	3	0.0073	0.0086	0.0073	0.0083	0.0072	0.0097
COBALT-F	9	8	0.0009	0.0050	0.0010	0.0050	0.0000	0.0050
CONDUCTIVITY	58	0	818.5562	818.5562	804.1000	804.1000	806.0500	806.0500
COPPER	9	4	0.0099	0.0116	0.0094	0.0110	0.0125	0.0145
COPPER-F	9	8	0.1300	0.1333	0.1560	0.1592	0.0000	0.0040
D-02	4	0	9.0250	9.0250	9.0250	9.0250	.	.
DI-N-BUTYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DI-N-OCTYLPHTHALATE	1	0	0.1000	0.1000	0.1000	0.1000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	8	0	3.2917	3.2917	.	.	5.0750	5.0750
ENDRIN	4	4	0.0000	0.0875	0.0000	0.0875	.	.
ETHYLBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	7	0	0.3375	0.3375	0.1667	0.1667	0.8500	0.8500
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	13	0	116.1563	116.1563	18.8000	18.8000	27.7500	27.7500
IRON-F	13	0	3.0337	3.0337	2.9986	2.9986	2.4715	2.4715
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	8	1	0.0160	0.0168	0.0145	0.0155	0.0222	0.0222
LEAD-F	8	7	0.0007	0.0045	0.0000	0.0040	0.0035	0.0065
LINDANE	4	4	0.0000	0.0175	0.0000	0.0175	.	.
LITHIUM	9	5	0.0037	0.0065	0.0022	0.0054	0.0110	0.0120
LITHIUM-F	9	9	0.0000	0.0040	0.0000	0.0040	0.0000	0.0040
MAGNESIUM	9	0	18.5833	18.5833	18.6000	18.6000	18.5000	18.5000
MAGNESIUM-F	9	0	17.9583	17.9583	18.0000	18.0000	17.7500	17.7500
MANGANESE	13	0	9.3312	9.3312	7.2800	7.2800	4.4250	4.4250
MANGANESE-F	13	0	6.6094	6.6094	6.9400	6.9400	4.3000	4.3000
MERCURY	9	8	0.0002	0.0004	0.0000	0.0002	0.0013	0.0014
MERCURY-F	9	8	0.0000	0.0002	0.0000	0.0002	0.0001	0.0002
METHOXYCHLOR	4	4	0.0000	0.0700	0.0000	0.0700	.	.
METHYLENE CHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
MOLYBDENUM	9	8	0.0005	0.0101	0.0000	0.0100	0.0032	0.0107
MOLYBDENUM-F	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	9	5	0.0095	0.0154	0.0088	0.0148	0.0132	0.0182
NICKEL-F	9	8	0.0023	0.0107	0.0028	0.0108	0.0000	0.0100
NIOBIUM	9	7	0.0012	0.0077	0.0000	0.0070	0.0075	0.0110
NIOBIUM-F	9	8	0.0004	0.0071	0.0000	0.0070	0.0024	0.0076
NITRATE NITROGEN	9	9	0.0000	0.1100	0.0000	0.1100	0.0000	0.1100
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	49	0	6.9619	6.9619	7.0027	7.0027	7.0050	7.0050
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	9	4	0.0039	0.0044	0.0048	0.0052	.	.
PHOSPHORUS	9	5	0.2517	0.3183	0.3020	0.3420	0.0000	0.2000
PHOSPHORUS-F	9	7	0.1133	0.2467	0.1360	0.2560	0.0000	0.2000
POTASSIUM	9	0	4.9583	4.9583	4.1400	4.1400	9.0500	9.0500
POTASSIUM-F	9	0	3.4458	3.4458	2.9000	2.9000	6.1750	6.1750

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

	OVERALL				BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	12	0	81.7714	81.7714	59.0000	59.0000	56.0000	56.0000
SELENIUM	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
SELENIUM-F	9	8	0.0008	0.0050	0.0010	0.0050	0.0000	0.0050
SILICON	9	0	8.4375	8.4375	7.9400	7.9400	10.9250	10.9250
SILICON-F	9	0	2.5917	2.5917	2.6600	2.6600	2.2500	2.2500
SILVER	9	9	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVER-F	9	9	0.0000	0.0060	0.0000	0.0060	0.0000	0.0060
SILVEX	5	5	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	13	0	27.6875	27.6875	29.0000	29.0000	29.5000	29.5000
SODIUM-F	13	0	27.0625	27.0625	28.0000	28.0000	30.2500	30.2500
STRONTIUM	9	0	0.1696	0.1696	0.1660	0.1660	0.1875	0.1875
STRONTIUM-F	9	0	0.1637	0.1637	0.1580	0.1580	0.1925	0.1925
STYRENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	13	0	24.8656	24.8656	21.1400	21.1400	3.9750	3.9750
TEMPERATURE	12	0	17.2893	17.2893	17.6000	17.6000	14.9250	14.9250
TETRACHLOROETHENE	4	3	4.0000	7.7500	4.0000	7.7500	.	.
THALLIUM	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THALLIUM-F	9	9	0.0000	0.0100	0.0000	0.0100	0.0000	0.0100
THORIUM	9	9	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
THORIUM-F	9	9	0.0000	0.2000	0.0000	0.2000	0.0000	0.2000
TITANIUM	9	0	0.1222	0.1222	0.1098	0.1098	0.1842	0.1842
TITANIUM-F	9	5	0.0040	0.0062	0.0042	0.0066	0.0032	0.0039
TOLUENE	4	3	0.2500	4.0000	0.2500	4.0000	.	.
TOTAL ORGANIC CARBON (TOC)	25	0	92.7488	92.7488	128.1533	128.1533	.	.
TOTAL XYLENES	4	2	2.5000	5.0000	2.5000	5.0000	.	.
TOX	30	0	91.7857	91.7857	120.3500	120.3500	.	.
TOXAPHENE	5	5	0.0000	1.6000	0.0000	1.6000	.	.
TRANS-1,2-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRANS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	4	3	2.0000	5.7500	2.0000	5.7500	.	.
TURBIDITY	4	0	171.0000	171.0000	171.0000	171.0000	.	.
URANIUM	9	2	0.0037	0.0040	0.0036	0.0038	.	.
URANIUM-F	9	0	0.0057	0.0057	0.0072	0.0072	.	.
VANADIUM	9	4	0.0100	0.0121	0.0082	0.0102	0.0190	0.0215
VANADIUM-F	9	9	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
VINYL ACETATE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
ZINC	9	1	0.0650	0.0651	0.0580	0.0580	0.1002	0.1005
ZINC-F	9	2	0.0240	0.0241	0.0236	0.0236	0.0260	0.0265
ZIRCONIUM	9	6	0.0031	0.0069	0.0028	0.0068	0.0048	0.0073
ZIRCONIUM-F	10	10	0.0000	0.0050	0.0000	0.0050	0.0000	0.0050
1,1-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
1,1,1-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,2-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	5	5	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
UNW-11								
ACENAPHTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACENAPHTHYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ACETONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
ALPHA ACTIVITY	4	0	9.4750	9.4750	9.4750	9.4750	.	.
ALUMINUM	5	0	2.1880	2.1880	2.1880	2.1880	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
ALUMINUM-F	5	1	0.1904	0.1944	0.1904	0.1944	.	.
ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
ANTIMONY	4	4	0.0000	0.0500	0.0000	0.0500	.	.
ANTIMONY-F	4	4	0.0000	0.0500	0.0000	0.0500	.	.
ARSENIC	5	5	0.0000	0.0050	0.0000	0.0050	.	.
ARSENIC-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
BARIUM	5	0	0.0614	0.0614	0.0614	0.0614	.	.
BARIUM-F	5	0	0.0414	0.0414	0.0414	0.0414	.	.
BENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BENZO(A)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(A)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(B)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(G,H,I)PERYLENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZO(K)FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BENZOIC ACID	1	1	0.0000	50.0000	0.0000	50.0000	.	.
BENZYL ALCOHOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BERYLLIUM	5	4	0.0001	0.0004	0.0001	0.0004	.	.
BERYLLIUM-F	5	5	0.0000	0.0003	0.0000	0.0003	.	.
BETA ACTIVITY	4	0	14.7500	14.7500	14.7500	14.7500	.	.
BIS(2-CHLOROETHOXY)METHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROETHYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-CHLOROISOPROPYL)ETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BIS(2-ETHYLHEXYL)PHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
BORON	5	0	0.0374	0.0374	0.0374	0.0374	.	.
BORON-F	5	1	0.1638	0.1646	0.1638	0.1646	.	.
BROMODICHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOFORM	4	4	0.0000	5.0000	0.0000	5.0000	.	.
BROMOMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CADMIUM	5	4	0.0022	0.0046	0.0022	0.0046	.	.
CADMIUM-F	5	5	0.0000	0.0030	0.0000	0.0030	.	.
CALCIUM	5	0	34.0200	34.0200	34.0200	34.0200	.	.
CALCIUM-F	5	0	35.6000	35.6000	35.6000	35.6000	.	.
CARBON DISULFIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CARBON TETRACHLORIDE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLORIDE	6	0	4.8167	4.8167	3.0750	3.0750	.	.
CHLOROBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
CHLOROETHANE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
CHLOROFORM	4	3	1.0000	4.7500	1.0000	4.7500	.	.
CHLOROMETHANE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
CHROMIUM	5	4	0.0036	0.0116	0.0036	0.0116	.	.
CHROMIUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
CHRYSENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
CIS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
COBALT	5	4	0.0015	0.0055	0.0015	0.0055	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
COBALT-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
CONDUCTIVITY	27	0	643.0571	643.0571	212.1200	212.1200	.	.
COPPER	5	3	0.0047	0.0071	0.0047	0.0071	.	.
COPPER-F	5	4	0.0022	0.0054	0.0022	0.0054	.	.
D-02	4	0	8.8500	8.8500	8.8500	8.8500	.	.
DI-N-BUTYLPHTHALATE	1	0	2.0000	2.0000	2.0000	2.0000	.	.
DI-N-OCTYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZ(A,H)ANTHRACENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBENZOFURAN	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIBROMOCHLOROMETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
DIETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DIMETHYLPHTHALATE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
DISSOLVED OXYGEN	2	0	7.6500	7.6500	.	.	.	.
ENDRIN	4	4	0.0000	0.0750	0.0000	0.0750	.	.
ETHYLBENZENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
FLUORANTHENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
FLUORIDE	4	2	0.0425	0.0925	0.0425	0.0925	.	.
FREON 113	1	0	10.0000	10.0000	10.0000	10.0000	.	.
HEXACHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROBUTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROCYCLOPENTADIENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
HEXACHLOROETHANE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
INDENO(1,2,3-CD)PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
IRON	7	0	2.5729	2.5729	2.6260	2.6260	.	.
IRON-F	7	2	0.1066	0.1077	0.1466	0.1474	.	.
ISOPHORONE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
LEAD	4	0	0.0130	0.0130	0.0130	0.0130	.	.
LEAD-F	4	2	0.0050	0.0070	0.0050	0.0070	.	.
LINDANE	4	4	0.0000	0.0150	0.0000	0.0150	.	.
LITHIUM	5	4	0.0012	0.0044	0.0012	0.0044	.	.
LITHIUM-F	5	5	0.0000	0.0040	0.0000	0.0040	.	.
MAGNESIUM	5	0	4.7400	4.7400	4.7400	4.7400	.	.
MAGNESIUM-F	5	0	4.5800	4.5800	4.5800	4.5800	.	.
MANGANESE	7	0	0.1399	0.1399	0.1410	0.1410	.	.
MANGANESE-F	7	0	0.0424	0.0424	0.0508	0.0508	.	.
MERCURY	5	5	0.0000	0.0002	0.0000	0.0002	.	.
MERCURY-F	5	5	0.0000	0.0002	0.0000	0.0002	.	.
METHOXYCHLOR	4	4	0.0000	0.0600	0.0000	0.0600	.	.
METHYLENE CHLORIDE	4	3	2.2500	6.0000	2.2500	6.0000	.	.
MOLYBDENUM	5	5	0.0000	0.0100	0.0000	0.0100	.	.
MOLYBDENUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
N-NITROSO-DI-N-PROPYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
N-NITROSODIPHENYLAMINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
F = filtered								
NAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
NICKEL	5	3	0.0086	0.0146	0.0086	0.0146	.	.
NICKEL-F	5	4	0.0046	0.0126	0.0046	0.0126	.	.
NIOBIUM	5	5	0.0000	0.0070	0.0000	0.0070	.	.
NIOBIUM-F	5	4	0.0015	0.0071	0.0015	0.0071	.	.
NITRATE NITROGEN	5	0	2.2620	2.2620	2.2620	2.2620	.	.
NITROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PENTACHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
PH	20	0	6.4971	6.4971	6.6000	6.6000	.	.
PHENANTHRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
PHENOLS	7	2	0.0037	0.0046	0.0052	0.0052	.	.
PHOSPHORUS	5	5	0.0000	0.2000	0.0000	0.2000	.	.
PHOSPHORUS-F	5	5	0.0000	0.2000	0.0000	0.2000	.	.
POTASSIUM	5	0	2.7600	2.7600	2.7600	2.7600	.	.
POTASSIUM-F	5	0	2.2000	2.2000	2.2000	2.2000	.	.
PYRENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
REDOX	6	0	301.6667	301.6667	331.2500	331.2500	.	.
SELENIUM	5	5	0.0000	0.0050	0.0000	0.0050	.	.
SELENIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
SILICON	5	0	6.4600	6.4600	6.4600	6.4600	.	.
SILICON-F	5	0	4.3400	4.3400	4.3400	4.3400	.	.
SILVER	5	5	0.0000	0.0060	0.0000	0.0060	.	.
SILVER-F	5	5	0.0000	0.0060	0.0000	0.0060	.	.
SILVEX	5	5	0.0000	0.1400	0.0000	0.1400	.	.
SODIUM	7	0	3.1857	3.1857	2.7600	2.7600	.	.
SODIUM-F	7	0	3.3000	3.3000	2.8800	2.8800	.	.
STRONTIUM	5	0	0.0470	0.0470	0.0470	0.0470	.	.
STRONTIUM-F	5	0	0.0468	0.0468	0.0468	0.0468	.	.
STYRENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
SULFATE	7	0	6.0857	6.0857	5.5400	5.5400	.	.
TEMPERATURE	6	0	17.7667	17.7667	17.2000	17.2000	.	.
TETRACHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
THALLIUM	5	5	0.0000	0.0100	0.0000	0.0100	.	.
THALLIUM-F	5	5	0.0000	0.0100	0.0000	0.0100	.	.
THORIUM	5	5	0.0000	0.2000	0.0000	0.2000	.	.
THORIUM-F	5	5	0.0000	0.2000	0.0000	0.2000	.	.
TITANIUM	5	2	0.0552	0.0564	0.0552	0.0564	.	.
TITANIUM-F	5	4	0.0016	0.0040	0.0016	0.0040	.	.
TOLUENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TOTAL COLIFORM BACTERIA	1	0	3.0000	3.0000	3.0000	3.0000	.	.
TOTAL ORGANIC CARBON (TOC)	20	0	29.9190	29.9190	40.6000	40.6000	.	.
TOTAL XYLENES	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TOX	19	4	67.9286	69.7143	93.4500	93.4500	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
TOXAPHENE	5	5	0.0000	1.4000	0.0000	1.4000	.	.
TRANS-1,2-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRANS-1,3-DICHLOROPROPENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TRICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
TURBIDITY	4	0	93.0000	93.0000	93.0000	93.0000	.	.
U-235	1	0	1.0200	1.0200	1.0200	1.0200	.	.
URANIUM	7	3	0.0083	0.0087	0.0116	0.0118	.	.
URANIUM-F	7	2	0.0066	0.0069	0.0092	0.0092	.	.
VANADIUM	5	4	0.0019	0.0059	0.0019	0.0059	.	.
VANADIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
VINYL ACETATE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
VINYL CHLORIDE	4	3	0.0000	10.0000	0.0000	10.0000	.	.
ZINC	5	1	0.0718	0.0720	0.0718	0.0720	.	.
ZINC-F	5	1	0.0538	0.0540	0.0538	0.0540	.	.
ZIRCONIUM	5	5	0.0000	0.0050	0.0000	0.0050	.	.
ZIRCONIUM-F	5	5	0.0000	0.0050	0.0000	0.0050	.	.
1,1-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1-DICHLOROETHENE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,1-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2-TRICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,1,2,2-TETRACHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,2-DICHLOROETHANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2-DICHLOROPROPANE	4	4	0.0000	5.0000	0.0000	5.0000	.	.
1,2,4-TRICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,3-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
1,4-DICHLOROBENZENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-BUTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROETHYLVINYL ETHER	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLORONAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-CHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-HEXANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLNAPHTHALENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2-NITROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-D	5	5	0.0000	1.4000	0.0000	1.4000	.	.
2,4-DICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DIMETHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4-DINITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,4,5-TRICHLOROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.
2,4,6-TRICHLOROPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
2,6-DINITROTOLUENE	1	1	0.0000	10.0000	0.0000	10.0000	.	.

DATA SUMMARY FOR K-1407-C HOLDING POND GROUNDWATER MONITORING WELLS (cont.)

(The number of significant figures is software dependent and is not necessarily indicative of the analytical precision.)

			OVERALL		BASE YEAR		ASSESSMENT PERIOD	
			AVERAGE		AVERAGE		AVERAGE	
PARAMETER F = filtered	N	N<DL	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND	LOWER BOUND	UPPER BOUND
3-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
3,3'-DICHLOROBENZIDINE	1	1	0.0000	20.0000	0.0000	20.0000	.	.
4-BROMOPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLORO-3-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROANILINE	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-CHLOROPHENYL-PHENYLETHER	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYL-2-PENTANONE	4	4	0.0000	10.0000	0.0000	10.0000	.	.
4-METHYLPHENOL	1	1	0.0000	10.0000	0.0000	10.0000	.	.
4-NITROANILINE	1	1	0.0000	50.0000	0.0000	50.0000	.	.
4-NITROPHENOL	1	1	0.0000	50.0000	0.0000	50.0000	.	.

APPENDIX C

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
CUSTOMS HOUSE
701 BROADWAY
NASHVILLE, TENNESSEE 37219-5403

CERTIFIED MAIL #P 169-141 650
RETURN RECEIPT REQUESTED

July 11, 1988

Mr. Ronald O. Hultgren
Director, Enriching Operations Division
U.S. Department of Energy
P.O. Box 2003
Oak Ridge, TN 37831

RE: U.S. Department of Energy, ORGDP K-1407-C
Pond Clean Closure Proposal/Continued Monitoring Programs

Dear Mr. Hultgren:

The Division of Solid Waste Management (the "Division") has reviewed previously submitted documents, "K-1407-B and K-1407-C Surface Impoundment False-Positive Groundwater Assessment" (May 6, 1988) and "K-1407-C Groundwater Assessment and Clean Closure Justification" (June 6, 1988). The former of the two documents was completed, at the Division's suggestion, in an attempt to substantiate the claim (after the first determination) that contamination in the K-1407-C pond downgradient wells was being falsely indicated. Sampling and analysis conducted during the 30-day false-positive assessment period in November 1987 (along with the resulting statistical comparisons) suggest several important factors supporting the claim that the K-1407-C impoundment has not adversely impacted the underlying groundwater. Some of the more significant factors include:

(1) Conductivity levels in the downgradient wells show trends of being attributable to concentrations of nonhazardous metals (e.g., calcium, magnesium, etc.).

(2) Hazardous constituents (e.g., barium and arsenic) present in downgradient wells and shown to be statistically significant are below drinking water standards (chromium was present in downgradient well UNW-9 in concentrations above drinking water standards, but was not statistically significant).

(3) Concentrations of certain hazardous constituents (e.g., barium and lead) were above drinking water standards in the upgradient well UNW-6 and lead was statistically significant (within-well test). No assessment period averages for lead or barium in the downgradient wells demonstrated statistically significant levels or exceeded drinking water standards.

Therefore, based in part on the apparent legitimacy of the false-positive claim (including those pertinent factors referenced above), and upon the proper design of the detection monitoring system, the Division concurs with your proposal to proceed with clean closure of K-1407-C pond. It should be noted, however, that such an agreement is provided support by DOE's proposal to continue a modified detection monitoring program as outlined in "K-1407-C Groundwater Assessment and Clean Closure Justification." Under that proposal, the Division will require that, in addition to the within-well statistical comparison to be performed for conductivity, both a within-well and an upgradient versus downgradient well statistical comparison for analyzed metals also be performed. Metals may be sampled/analyzed during the semi-annual/annual frequency (2 times a year). This, incidentally, conflicts with the quarterly frequency referenced on page 56, part 8.2 in the false-positive groundwater assessment report.

If, during the closure period, analysis indicates a statistically significant comparison has occurred for a hazardous constituent, then DOE will be required to submit to the Division a post closure permit application establishing a corrective action program designed to bring the facility into compliance with applicable groundwater requirements.

If you should have any questions regarding this correspondence, please feel free to contact this office at (615) 741-3424.

Sincerely,

Dale Ozer FOR

Walker F. Howell
Geologist, DOE Unit
Division of Solid Waste Management

WFH/F2058188

cc: Earl Leming, WPC-TDHE
Johathan Forstrom, DOE
Mike Smith, DOE

APPENDIX D

GERAGHTY & MILLER, INC.
Ground-Water Consultants

LITHOLOGIC LOG

BORING NO. **UNW-6**

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,228.00 EAST 1,467.20	787.04 ft msl	39.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
A. Laase	5 feet	Cuttings	10-24-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
R. Gossage	Geotek	Hollow-Stem Auger	Mobile B-53
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY, (100%), red.	
10			
20			
30			
		35.0' - 39.0' Clay, red, plastic.	
40			Refusal at 39 ft
50			
60			
70			
80			
90			

GERAGHTY & MILLER, INC.
Ground-Water Consultants

LITHOLOGIC LOG

BORING NO. **UNW-7**

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-B	SOUTH 24,471.92 EAST 1,269.62	757.38 ft msl	11.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
A. Laase	5 feet	Cuttings	10-25-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
R. Gossage	Geotek	Hollow-Stem Auger	Mobile B-53
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY, (100%), red.	
10		10.0' - 11.0' Clay, red and brown.	Refusal at 11 ft
20			
30			
40			
50			
60			
70			
80			
90			

GERAGHTY & MILLER, INC.
Ground-Water Consultants

LITHOLOGIC LOG

BORING NO. **UNW-8**

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,386.21 EAST 942.81	756.47 ft msl	16.5 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
G. Weiss	5 feet	Cuttings	10-30-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
J. Cason	Alsay, Inc.	Hollow-Stem Auger	Diedrich D-50
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY, (100%), olive green and red mottled, low plasticity.	
10		10.0' - 16.5' Clay, olive-green with weathered shale and red, moderately plastic clay.	
			Refusal at 16.5 ft
20			
30			
40			
50			
60			
70			
80			
90			

GERAGHTY & MILLER, INC.
Ground-Water Consultants

LITHOLOGIC LOG

BORING NO. UNW-9

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,311.57 EAST 793.53	756.32 ft msl	13.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
G. Weiss	5 feet	Cuttings	10-31-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
J. Cason	Alsay, Inc.	Hollow-Stem Auger	Diedrich D-50
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY, (100%), brown, moderately plastic.	
10		10.0' - 13.0' Mud, brown, soupy, with high-plasticity brown and red clay.	Refusal at 13 ft
20			
30			
40			
50			
60			
70			
80			
90			

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LITHOLOGIC LOG

BORING NO. UNW-10

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,003.18 EAST 691.80	759.37 ft msl	15.1 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
G. Weiss	5 feet	Cuttings	10-30-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
J. Cason	Alsay, Inc.	Hollow-Stem Auger	Diedrich D-50
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0		CLAY, (100%), brown, low plasticity, with fragments of brown and red, weathered shale.	
10		10.0' - 15.1' Clay, brown, moderately high plasticity, with fragments of maroon, weathered shale.	Refusal at 15.1 ft
20			
30			
40			
50			
60			
70			
80			
90			

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LITHOLOGIC LOG

BORING NO. **UNW-11**

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,042.92 EAST 1,012.92	774.34 ft msl	27.6 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
J. Archer	5 feet	Cuttings	10-29-85
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
J. Cason	Alsay, Inc.	Hollow-Stem Auger	Diedrich D-50
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY, (100%), red, with abundant chert fragments.	
10			No recovery from 10 ft to 27.6 ft, sampler lost in hole.
20			
			Refusal at 27.6 ft
30			
40			
50			
60			
70			
80			
90			

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LITHOLOGIC LOG

BORING NO. UNW-22

PROJECT ORGDP Monitor-Well Installation Program - Phase II

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-B	SOUTH 24,532.53 EAST 1,436.31	763.71 ft msl	16.5 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
J. Walker	5 feet	Cuttings	01-03-87
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
R. Lenning	Middle Georgia	Hollow-Stem Auger	Mobile B-53
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		FILL (100%), clay and gravel for road base.	
		CLAY (90%), soft, plastic, reddish-brown; silt (10%), brown with scattered limestone fragments.	
10			Clay is wet at 10 ft
		13.0' - 16.3' Clay is gray-brown with increased silt (30%).	
			Refusal at 16.5 ft
20			
30			
40			
50			
60			
70			
80			
90			

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LITHOLOGIC LOG

BORING NO. UNW-23

PROJECT ORGDP Monitor-Well Installation Program - Phase II

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,392.83 EAST 1,493.18	769.91 ft msl	25.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
J. Walker	5 feet	Cuttings	01-03-87
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
R. Lenning	Middle Georgia	Hollow-Stem Auger	Mobile B-53
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0			
		CLAY (90%), soft, plastic, dark-brown; silt (5%), brown; scattered limestone fragments (5%), gray to brown.	
10			Little if any cuttings from below 10 ft
20			
			Refusal at 25 ft
30			
40			
50			
60			
0			
0			

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LITHOLOGIC LOG

BORING NO. **BRW-7**

PROJECT ORGDP Monitor-Well Installation Program - Phase I

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-B	SOUTH 24,509.81 EAST 910.07	754.31 ft msl	100.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
D. Hubert/D. Brice	5 feet	Cuttings	02-04-86
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
A. Pippin	Alsay, Inc.	Air Rotary	Failing 1250
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	Century Geophysical	Natural Gamma, Density, Single Arm Caliper, Gamma-Gamma Compensated Density	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0		FILL (100%), plasticity clay with rock fragments.	
10		LIMESTONE (100%), blue-gray, cherty, micritic, with secondary calcite.	
20			
30		22.0' - 100.0' LIMESTONE (50%), blue-gray, micritic to lightly oolitic, cherty in places, with some secondary calcite; shale (50%), gray, blue-gray and green-gray, calcareous in places.	
40			
50			
60			
90			
100			
110			

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LITHOLOGIC LOG

BORING NO. BRW-13

PROJECT ORGDP Monitor-Well Installation Program - Phase II

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 24,045.16 EAST 1,036.00	775.87 ft msl	165.0 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
G. Weiss	5 feet	Cuttings	02-05-87
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
D. Wood	Graves Drilling	Air Rotary	Dresser T-70-W
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0		CLAY (100%), red, very firm, contains fragments of weathered limestone.	
10			
20			
30			
40		LIMESTONE (100%), light and dark gray, brown in places, micritic and oolitic, some secondary calcite and stylolites. 33.0' - 53.0' Highly fractured, weathered, possibly cavernous (particularly from 40.0' - 48.0').	Borehole produced large volume of red mud from 40 ft to 48 ft
50			
60			
70			
80			
90			

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LITHOLOGIC LOG

BORING NO. BRW-13

PROJECT ORGDP Monitor-Well Installation Program - Phase II

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
90		Same as above.	
100			
110			
120			
130			
140			
150			Borehole produced water (~1.4 gpm) from 150 ft to 165 ft
160			
170			
180			
190			
200			

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LITHOLOGIC LOG

BORING NO. BRW-14

PROJECT ORGDP Monitor-Well Installation Program - Phase II

LOCATION	K-25 PLANT COORDINATES	SURFACE ELEVATION	TOTAL DEPTH
K-25 Plant, K-1407-C	SOUTH 23,986.98 EAST 671.87	758.71 ft msl	57.3 ft
GEOLOGIST	**SAMPLE INTERVAL**	**SAMPLE TYPE**	**DATE WELL COMPLETED**
G. Weiss	5 feet	Cuttings	01-10-87
DRILLER	**DRILLING CONTRACTOR**	**DRILLING METHOD**	**RIG TYPE**
D. Wood	Graves Drilling	Air Rotary	Dresser T-70-W
PURPOSE OF BORING	**GEOPHYSICAL CONTRACTOR**	**GEOPHYSICAL LOGS**	
Monitor Well	None	None	

DEPTH IN FEET	GRAPHIC LOG	DESCRIPTION	COMMENTS
0		CLAY (100%), dark gray, silty, contains fragments of dark gray to maroon, weathered shale.	
10		10.0' - 15.0' Red-brown with fragments of weathered limestone or dolostone.	Clay moist at 10 ft
		15.0' - 30.0' Dark brown.	Clay wet at 15 ft Possible limestone lens or boulder from 18.5 ft to 20 ft. Nothing in cuttings but great deal of rod chatter.
20			
30		LIMESTONE (100%), light to dark gray and light brown, predominately micritic, oolitic in places, some secondary calcite and styloitic features, slightly weathered in places.	
40			
50		49.0' - 50.0' Fractured zone.	Borehole produced water (~3-4 gpm) at 49 ft
60			
70			
80			
90			