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**EGG-ER-11114
April 1994**

**Preliminary Scoping Track 2 Summary Report
for Operable Unit 2-05**

**K. J. Holdren
C. S. Blackmore
D. E. Burns**



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No. DE-AC07-76ID01570*

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**K. J. Holdren
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D. E. Burns**

Published April 1994

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April 1994**

Approved by:



T. S. Green, WAG 2 Manager

4/27/94
Date

ABSTRACT

This report presents the results of the preliminary scoping Track 2 investigation for Test Reactor Area Operable Unit (OU) 2-05. The objective of this report is to provide information to the waste area group managers from the U.S. Department of Energy Idaho Operation Office, the Idaho Department of Health and Welfare, and the Environmental Protection Agency Region 10 sufficient to support remedial decisions for the OU. OU 2-05 consists of four sites within TRA. These four sites, TRA-15, TRA-16, TRA-19, and TRA 603/605, are associated with radioactive underground storage tanks that were grouped into one OU to investigate the risk from contaminated subsurface soils. The primary contaminants of concern are radionuclides.

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ACKNOWLEDGMENTS

J. J. Jessmore, author of the OU 2-05 sampling and analysis plan and field team leader for the associated sampling activities, contributed significantly to this Track 2 project. In particular, he is acknowledged for his assistance in the preparation of this document by consulting with the authors, providing pertinent clarification and information, and reviewing for accuracy and completeness. In addition, J. J. Einerson provided statistical analysis and is gratefully acknowledged for his invaluable contribution.

Preliminary Scoping Track 2 Summary Report for Operable Unit 2-05

1. INTRODUCTION

This report presents the results of the Track 2 preliminary scoping for Operable Unit (OU) 2-05, Waste Area Group (WAG) 2, at the Idaho National Engineering Laboratory (INEL). WAG 2 consists of the Test Reactor Area (TRA) (see Figure 1-1). A Track 2 summary report is a Federal Facility Agreement and Consent Order (FFA/CO) product and has secondary deliverable status. In order to satisfy FFA/CO requirements, this report summarizes the information that was used to qualitatively assess the potential risks posed by OU 2-05.

A companion document to this summary report is titled "Track 2 Sampling and Analysis Plan for the Characterization of Waste Area Group 2, Operable Units 2-05 and 2-07" (Jessmore, 1993). The sampling and analysis plan (SAP) will be referenced throughout this summary report.

Although Revision 3 of the draft Track 2 guidance (DOE, 1992) was used to produce the Preliminary Scoping Packages (PSPs) for the four sites in the OU, Revision 5 (DOE, 1993) was followed to generate this summary report. Revision 5 indicates that the SOW and PSPs should be included as appendices to the summary report. However, these documents were attached in their entirety to the SAP. The SOW, without attachments, appears in Appendix E; otherwise, these documents will not be reproduced again as appendices to this document.

1.1 Description of OU 2-05

OU 2-05 consists of four sites: TRA-15, TRA-16, TRA-19, and TRA-603/605 at TRA (see Figure 1-2). As a result of known or potential leaks from underground storage tanks or piping associated with reactor and laboratory operations, all four sites potentially contained subsurface soil that was radioactively contaminated, and thus were grouped into one OU. A brief description of each site is given below. Specific details pertinent to each site are included in Sections 2 through 6.

- TRA-15 is comprised of the soil that surrounds the three radioactive hot waste underground storage tanks (USTs) designated TRA-713 tanks #2, #3, and #4. The tanks are 9,000-, 10,000-, and 10,000-gal capacities, respectively, and are seated in a concrete basin. Originally, four tanks were installed, but tank #1 was removed in the late 1960s because it was leaking. The Track 2 investigation for this site focuses on the potential for soil contamination in and around the tank site resulting from the leak from tank #1. The site is defined as soils from a depth of 4 m (13 ft) to basalt at an approximate depth of 11.3 m (37 ft). The upper boundary was based on engineering drawings that indicated that the bottom of the tank basin was 4.6–6.1 m (15–20 ft) below the surface. The lower boundary was determined by drilling boreholes and measuring the depth to basalt.

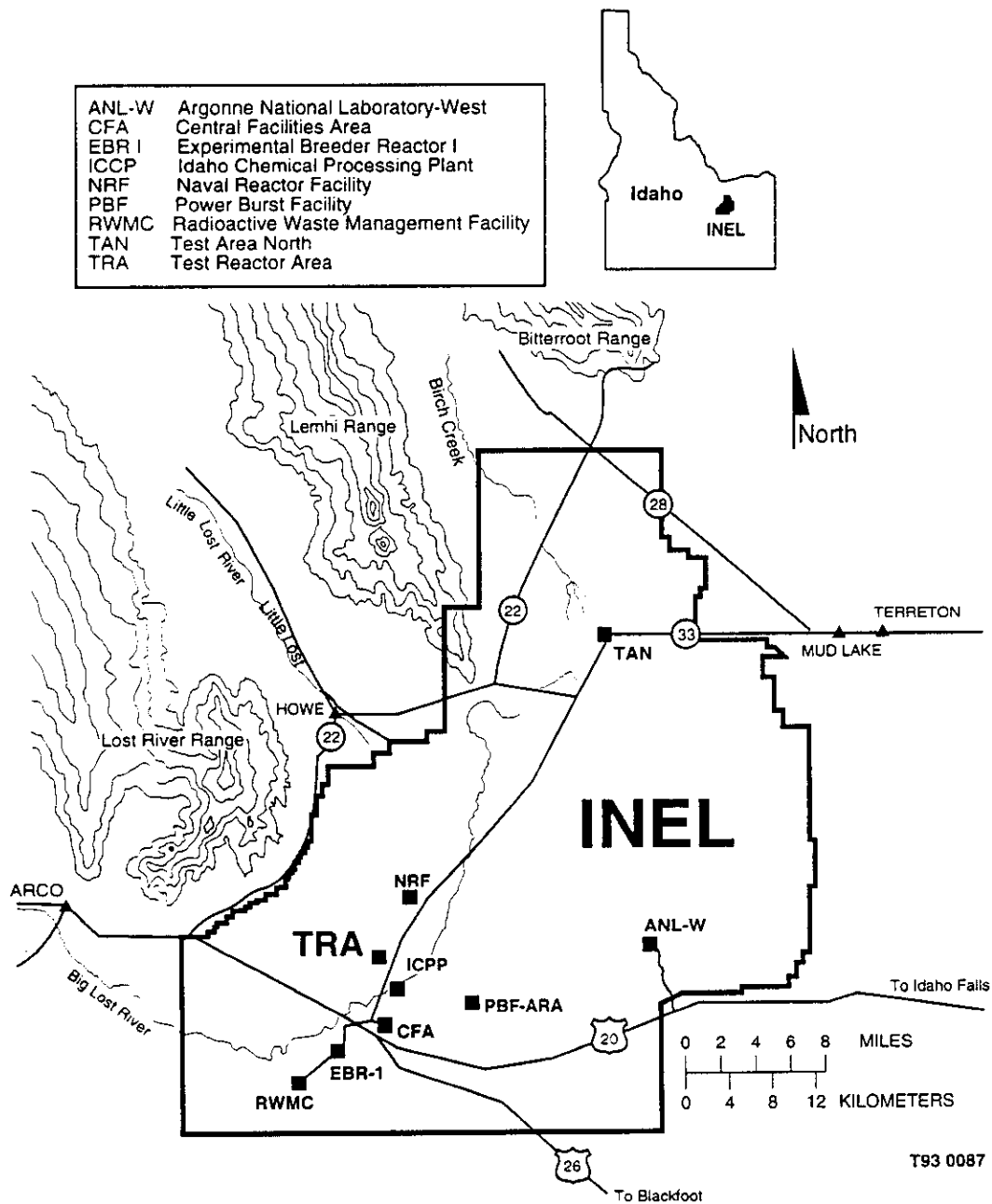
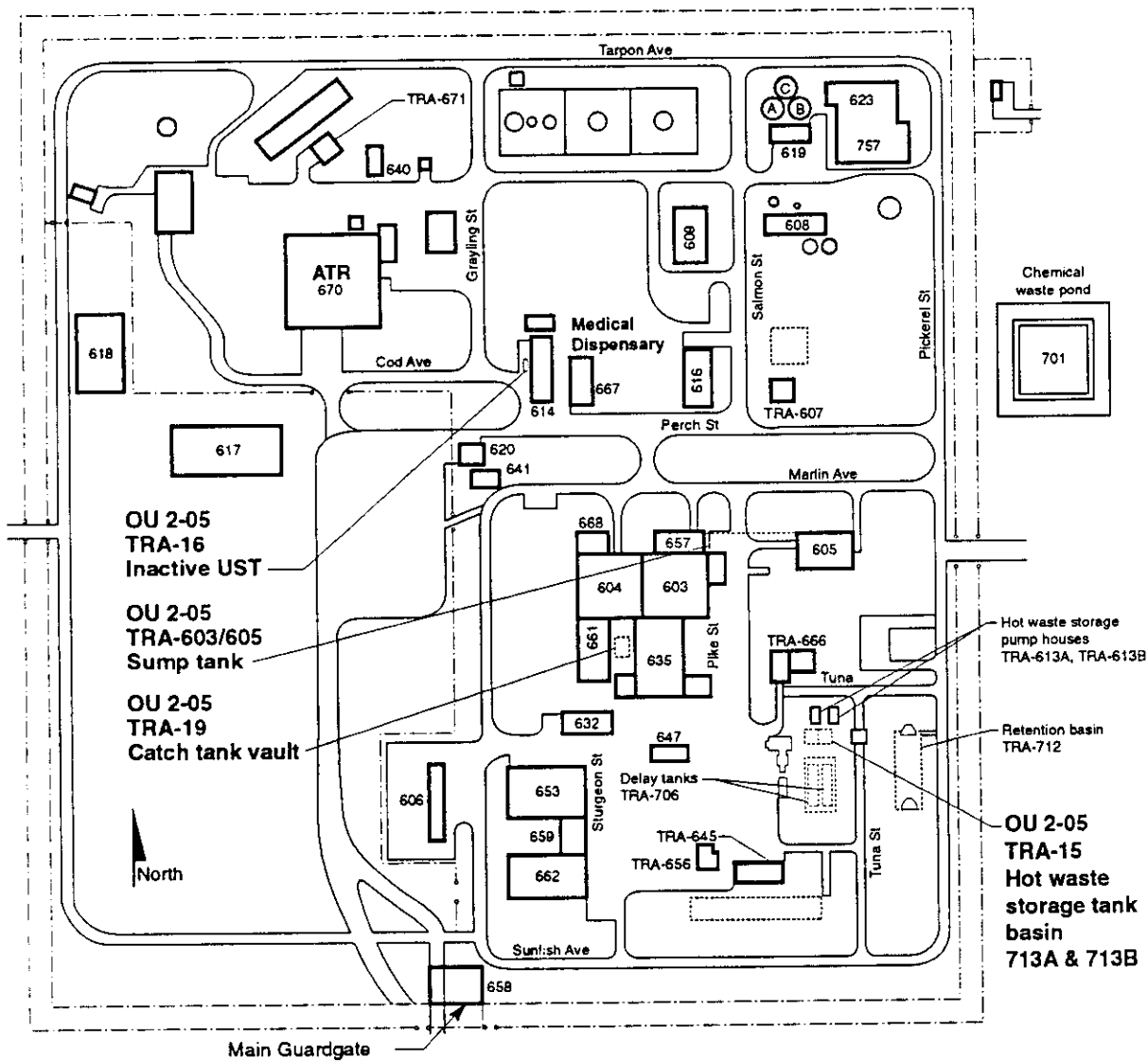


Figure 1-1. Map of the INEL and the relative location of TRA.



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Figure 1-2. Map of TRA and OU 2-05 sites TRA-15, TRA-16, TRA-19, TRA-603/605.

- TRA-16 was the site of a 300-gal UST that received metallurgy laboratory wastes. Although the tank probably never leaked, the site was included in this Track 2 OU to confirm that no subsurface soil contamination exists in the soil surrounding the historical tank site.
- TRA-19 consists of the soil surrounding four Materials Test Reactor (MTR) catch tanks located underground near TRA-630. The original four tanks and vault were replaced in 1986 with four new tanks and a new vault. Although there was no indication that the original tanks had leaked, there was some evidence that a pipe may have been damaged during the renovation, possibly contaminating the soil. The Track 2 focus for this site was to confirm that no soil contamination occurred from the original tanks.
- TRA-603/605 consists of subsurface soils associated with the MTR warm waste sump tank. The existing sump tank was originally the process water return head piping, a component of the process water loop between the reactor in MTR-603 and the process water building designated MTR-605. Although the site is defined as potentially radioactively contaminated soils associated with only the sump tank, the entire process water loop was examined. The portion of the process water system in use as the warm waste sump tank is mostly contained in a subsurface concrete pipe tunnel. The tunnel extends approximately 14 m (45 ft) north from the MTR-603 basement. The two process water lines originally formed a loop between the reactor and the process water building. The Track 2 investigation was primarily directed at confirming that there had been no leakage from this system that impacted subsurface soils.

1.2 Scoping Process Results

Preliminary scoping was performed for these sites, and a scoping meeting was held January 12–13, 1993. Representatives of all three regulatory agencies participated and generated the following recommendations:

- TRA-15: Perform Track 2 sampling to determine if leakage from the Hot Waste Storage Tanks has impacted subsurface soils.
- TRA-16: Obtain confirmation sampling and field observations from the upcoming tank removal procedure, and then assess the status of the site. This tank was still in place when the scoping meeting was held, and was scheduled for removal in the upcoming field season. The tank has since been removed.
- TRA-19: Locate additional historical data to confirm the noncontaminated status of subsurface soils associated with the site. In particular, attempt to locate Health Physics logs.
- TRA-603/605: Locate additional drawings and other data to substantiate the integrity of the process water loop. In particular, determine what materials were used in the construction of the pipe.

1.3 Report Organization

This report is organized by sites. Sections 2 through 5 contain complete summaries of the results of the Track 2 investigation, one section for each of the four sites in the OU as listed below:

- Section 2 - TRA-15 Hot Waste Tanks
- Section 3 - TRA-16 Underground Storage Tank Site
- Section 4 - TRA-19 Catch Tanks
- Section 5 - TRA-603/605 Warm Waste Sump Tank.

Each of these sections discusses site background and history, summary of data quality objectives (DQOs), summary of the data collection, deviations to the SAP, and a summary of the risk assessment for the site.

References are listed in Section 6. Appendices A and B contain discussion of QA/QC, data tables, and other supporting information pertinent to TRA-15 and TRA-16, respectively. Appendices C and D contain supporting documents related to TRA-19 and TRA-603/605. The SOW, without attachments, is included in Appendix E.

2. TRA-15 Hot Waste Tanks

2.1 OU 2-05 Site TRA-15 Track 2 Data Collection

2.1.1 TRA-15 Site Background and History

The underground storage tanks at TRA-15 are typically called the TRA Hot Waste Tanks and are designated as TRA-713 tanks #2, #3, and #4. Originally, there were four tanks. Tanks #1 and #2 were installed in the early 1950s and received wastes from the alpha labs in TRA-661 and the MTR TRA-630 catch tanks. Tanks #3 and #4 were installed in the late 1950s and received wastes from the same sources plus effluent from the ETR warm and hot waste catch tanks. The tanks were installed in two concrete basins, designated MTR-713 A and B, as shown in Figure 2-1. The floor of each basin, located approximately 5.8 m (19 ft) below the surface, was sloped toward a french drain designed to dispose leakage into the subsurface.

Tank #1 was discovered to be leaking and was removed in the late 1960s. TRA-15 is defined as the potentially contaminated subsurface soils resulting from the known leakage of tank #1. As discussed in the SAP, analysis results of tank #1 contents were not found in the search of historical data. However, in 1991, the contents of tank #3 were analyzed for major radionuclides. Based on common use and system design, the contents of tank #3 are assumed to be representative of tank #1. Table 2-1 lists the radionuclides present in the liquid in tank #3. During the preliminary Track 2 scoping, it was determined that sampling should be performed to assess the status of the subsurface soils associated with the tank site. This decision was based on the CSM that appears in Figure 2-2. A break in the pathway is shown after all three surface water release mechanisms because there is no surface water at TRA-15. Surface exposures within and downwind of the site, including "tracking" contamination on shoes, were eliminated due to the inaccessibility of contaminated soils. The only potentially complete pathways are to future residents via ingestion of groundwater.

2.1.2 TRA-15 Summary of Data Quality Objectives for Data Collection

During scoping, the WAG counterparts determined that additional data were required to adequately assess the risk from TRA-15. In particular, the conceptual site model (Figure 2-2) for the site indicated a possible risk to future residential receptors through ingestion of groundwater.

The contaminants of concern were identified as radionuclides. The primary data gap was the lack of empirical data regarding soil concentrations generated by the tank #1 product release. Therefore, DQOs were to collect and analyze subsurface soil samples to determine if the contents of tank #1 leaked into the soils below the concrete basin in sufficient amounts to generate an unacceptable risk, to identify the contaminants of concern and the concentrations present in the soils, and to make an estimate of the extent of contamination. Additional details regarding DQOs, sample collection design, and planned procedures are contained in the SAP.

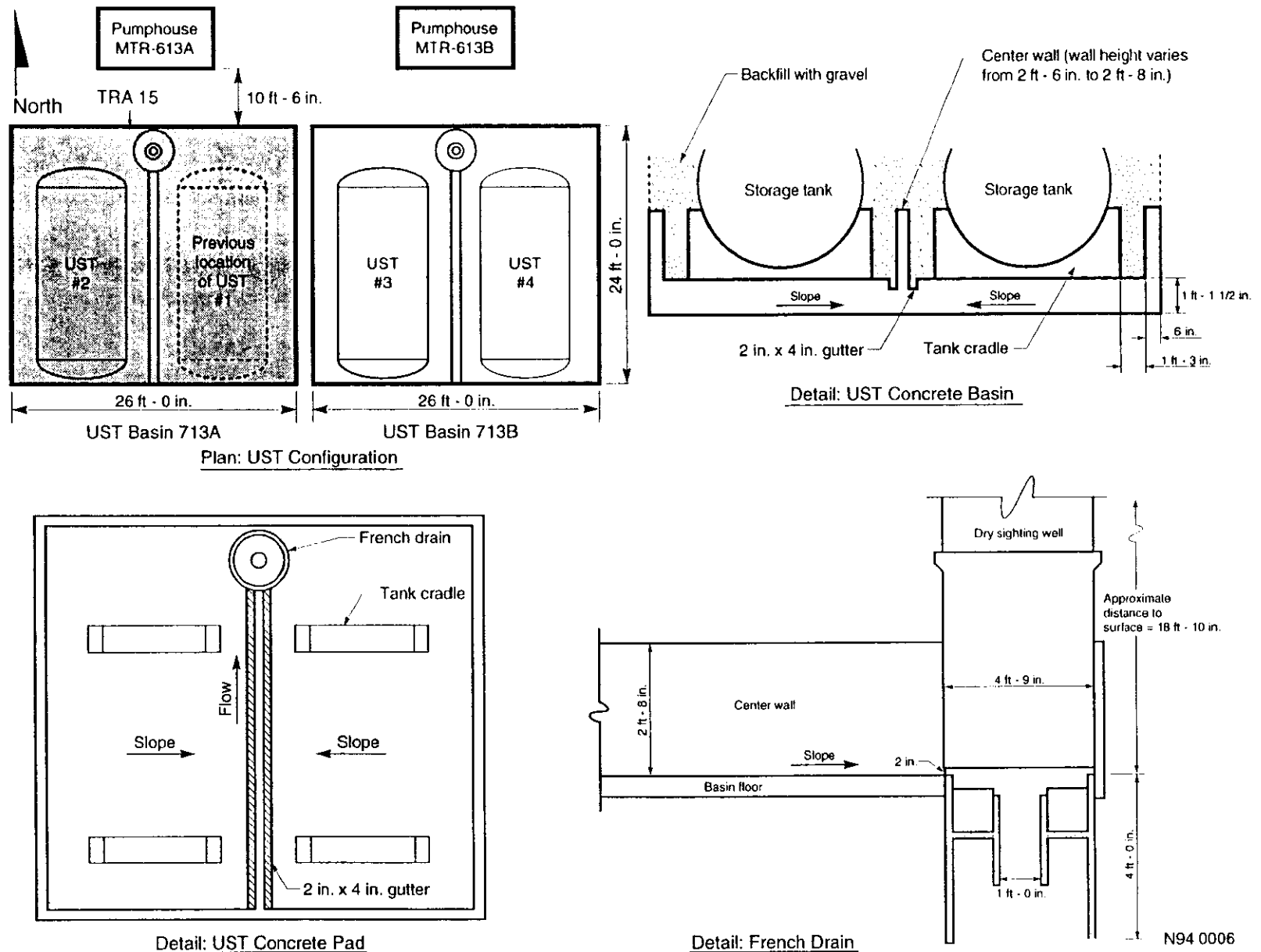


Table 2-1. Radionuclides present in the liquid of TRA-15 tank #3.^a

Radionuclide	Activity (pCi/L)	Total activity ^b (pCi)
Mn-54	9.770E-04	1.67E+01
Co-60	9.205E-03	1.57E+02
Nb-97	5.669E-03	9.69E+01
Ag-110m	4.555E-03	7.79E+01
Sb-125	1.063E-02	1.82E+02
Cs-134	1.532E-02	2.62E+02
Cs-137	5.809E-01	9.93E+03
Ce-144	1.410E-02	2.41E+02
Eu-154	1.005E-02	1.72E+02
Sr-90	5.809E-01	9.93E+03
Total	1.232E-00	2.11E+04

a. Data from U.S. DOE Hazardous Material Shipping Record (IDF 5480.3A), Shipping Order CPP 91-03119-2 (see SAP Appendix C-2).

b. Total activity based on 4,500 gal.

2.1.3 TRA-15 Summary of Data Collection

Evaluation of surface contamination at the site was performed primarily to satisfy safety requirements. Results were also used to confirm the location previously selected for BH #3. The site was gridded into 61 sections and surveyed for beta/gamma and alpha using hand-held instruments; 11 grids yielded readings greater than or equal to the field screening level of 100 cpm beta/gamma, and alpha was detected in four grids. Table 2-2 lists the detections. A copy of the survey, including a grid diagram, is contained in Appendix A. In addition, surface samples from BH #3 were collected for laboratory analysis.

To examine subsurface conditions, three boreholes to basalt were planned. The boreholes were located to maximize the probability of detection of contamination from the hot waste tanks, as illustrated in Figure 2-3. BH #1 was located 1.5 m (5 ft) north of the dry siting well for tank basin 713A and completed to a depth of 11.5 m (37 ft 1 in.). BH #2 was positioned 4.6 m (15 ft) west of the dry siting well centerline and 5.5 m (18 ft) south of the southwest corner of 613A (see Figure 2-3). An impassable obstruction was encountered during drilling of BH #2 at a depth of 6 m (20 ft). A new borehole, labeled BH #2A, was positioned 5.5 m (18 ft) west of the 713A well centerline and 6.7 m (22 ft) south of the corner of TRA-613A, about 1.2 m (4 ft) southwest of BH #2. Basalt was encountered in BH #2A at a depth of 11.7 m (38 ft 4.5 in.). BH #3, completed to a depth of 10.9 m (35 ft 10 in.), was located 9.1 m (30 ft) south of the 713A dry siting well just west of the centerline. For BHs #1 and #2, samples were collected beginning at a depth of 4 m (13 ft). Since drilling met refusal at 6 m (20 ft) in BH #2, sampling was continued at 6 m (20 ft) in BH #2A. BH #3 was sampled at the surface and at intervals down to basalt. The boreholes were drilled in numeric sequence. Soil samples from the boreholes were collected using a split-spoon sampler, with the areas around the sample locations protected by wind screens to eliminate windblown contamination during drilling and sampling activities.

SITE CONCEPTUAL MODEL

OU 2-05 TRA-15 STORAGE TANK 1 SOIL CONTAMINATION

Potentially Complete Pathways

Ø - Break in Pathway

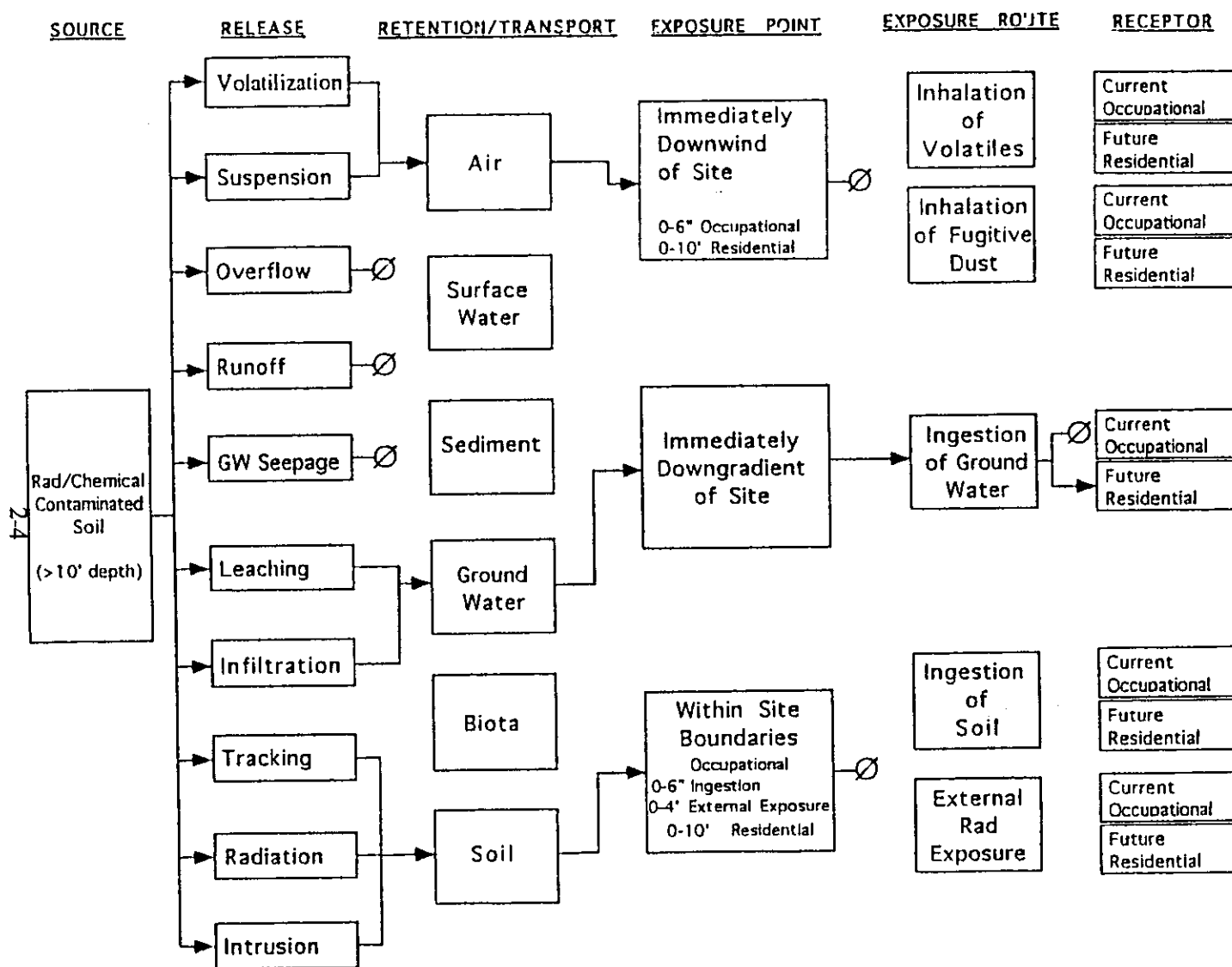


Figure 2-2. Site conceptual model showing potentially complete pathways of OU 2-05 TRA-15 Storage Tank 1 soil contamination.

Table 2-2. Surface contamination survey detections at TRA-15.

Grid number	Beta/gamma cpm	Alpha cpm
7	110	None detected
11	200	100
14	100	None detected
17	100	100
18	200	None detected
19	100	100
20	300	None detected
24	<100	50
33	100	None detected
60	200	None detected
61	200	None detected

Inadequate sample recoveries were anticipated because (a) the matrix between the surface and basalt at TRA is comprised of cobble and rock with limited sand, soil, and clay available for collection, and (b) the area was excavated and backfilled when the tanks were installed. Therefore, priorities were assigned before sampling activities commenced. Because radionuclides are the primary contaminants of concern, priority was given to sample collection for analysis of gross alpha/beta, Sr-90, Am-241, plutonium and uranium isotopes, and gamma spectroscopy. As anticipated, sample recoveries were frequently insufficient. Insufficient recovery was primarily due to the character of the sample matrix. Table 2-3 lists descriptions of the soils encountered in the boreholes. The field team leader directed the sampling with the prearranged priorities.

Maximum concentrations from the validated laboratory analysis of the collected soil samples are used to preserve conservatism in the risk assessment. These data appear in Table 2-4. A complete list of the analytical data for TRA-15 appears in Appendix A.

2.1.4 TRA-15 Deviations to the SAP

The Sampling and Analysis Plan Table included in the agency-reviewed SAP was revised before field activities commenced. The SAP contains a preliminary version of the table dated March 15, 1993. Field activities were conducted according to a revised table, also reviewed by the agencies, dated May 25, 1993. Most of the deviations from the SAP are due to the differences between these two tables. The revised table is included here in Table 2-5.

Table 2-3. Descriptions of soils encountered in the boreholes at TRA-15.

Interval (ft)	% Recovery	Description of soils
Borehole 1, basalt at 37 ft 1 in. (11.5 m)		
13-15	0	NR
15-17	0	NR
17-19	0	NR
19-21	100	35% cobble and light brown sandy clay; very moist
21-23	100	60% gravel; medium to large cobble; sand and sandy clay, not as moist as the 19-21 interval
25-27	NR	Moist to wet
27-29	NR	NR
29-31	NR	Very rocky and sandy clay; sand more coarse than previous; more percent volume; cobble weathered and rounded; traces of red-brown cinder/basalt
Borehole 2, refusal at 20 ft (6 m)		
0-9	NR	Rocky; 50% rock, 50% sandy clay; very moist
12	70	Larger cobble
13-15	45	Gray/brown sandy clay; 40% cobble moist to soggy
15-17	100	All pea gravel, probably backfill material
17-19	100	All gravel and pea gravel
19-20	30	All gravel and pea gravel; no cement
Borehole 2A, basalt at 38 ft 4.5 in. (11.7 m)		
22.5	NR	Medium to dark gray brown clay sand; abundant cobble and gravel; 75% gravel
23-25	NR	Decrease in gravel, increase in clay; very moist to soggy
25-27	NR	Very wet, dripping from split spoon; 60% cobble, 40% soil
27-29	NR	Medium to dark gray/brown, streaks of orange clay; 70% cobble and gravel with abundant basalt fragments
31-33	NR	Very wet; 80% gravel and cobble; lower part dense, fractured black basalt with some gray/brown clay and sandy soil
35-37	30	Gravel and sand, increased amounts of sand; noticeably drier
Borehole 3, basalt at 35 ft 10 in. (10.9 m)		
1-3	10	80% rock, 10% sand, 10% dirt with clay
5-7	50	All wet clay
13-15	60	Wet clay, sand, some rock
18-19	100	Wet sand with 50% cobble 7 cm in diameter
22-23	100	50% dirt and red rock, 25% clay and black rock, 25% brown clay and black rock
25-27	100	Dirt with small to large rock (65%); very compacted
29-31	100	Very compacted brown soil with 50% rock < 1 cm
33-35	100	50% soil, 50% rock

a. NR = not recorded.

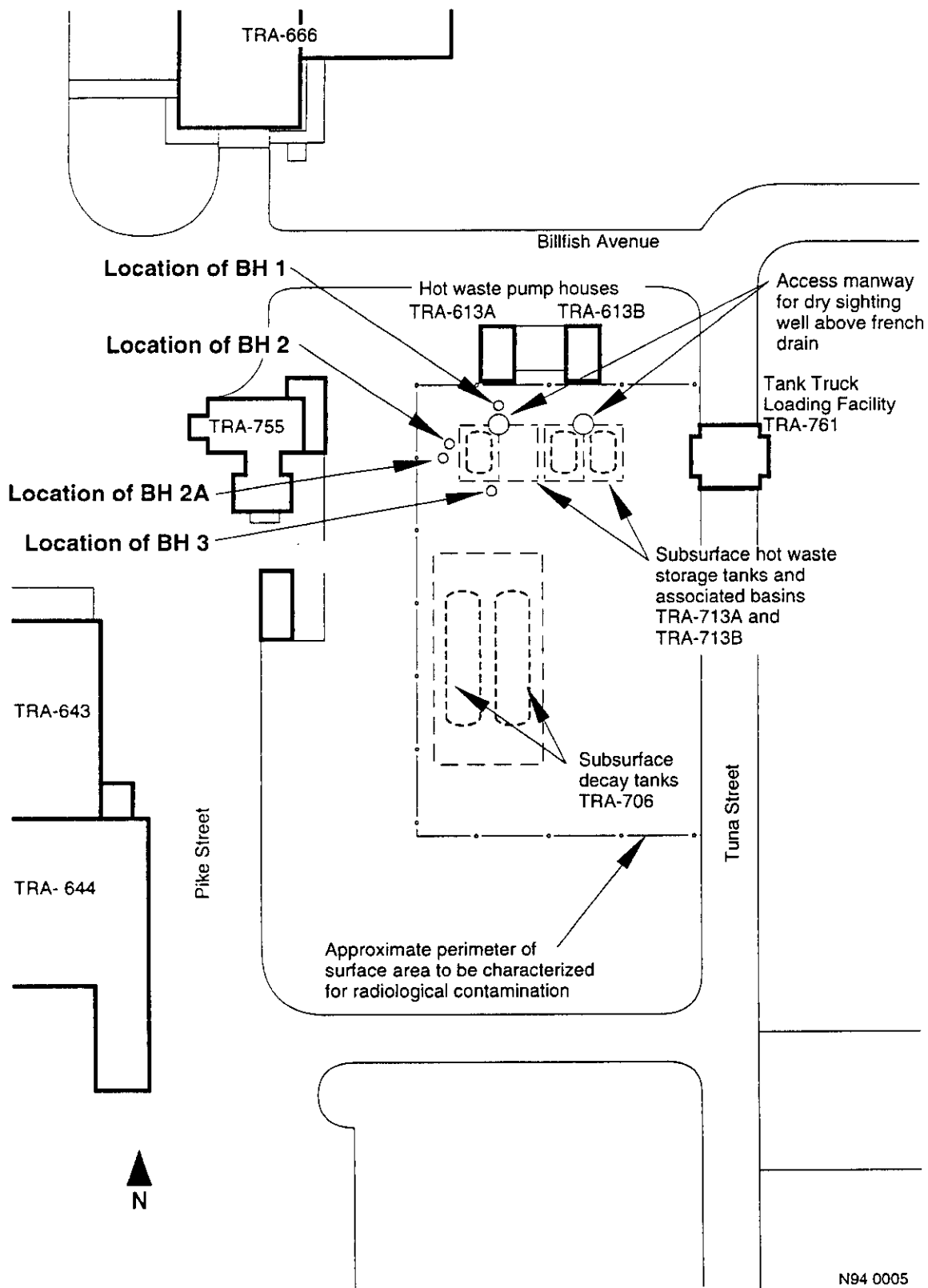


Figure 2-3. Sampling array for characterization of OU 2-05, TRA-15.

Table 2-4. Validated highest concentrations for constituents detected at TRA-15.

Contaminant	Highest detected concentration
<u>Metals:</u>	<u>mg/kg</u>
Aluminum	7,760
Arsenic	10
Barium	241
Beryllium	1.2
Cadmium	1.5
Calcium	127,000
Chromium	31
Cobalt	7.6
Copper	18
Iron	14,000
Lead	225
Magnesium	5,210
Manganese	364
Mercury	.06
Nickel	22
Potassium	1,530
Sodium	167
Vanadium	32.6
Zinc	98.8
<u>Inorganics:</u>	<u>mg/kg</u>
Chloride	5.75
Fluoride	2.16
Nitrate	3.06
Phosphate	.88
Sulfate	34.1
<u>Organics:</u>	<u>mg/kg</u>
Acetone	18
Bis(2-ethylhexyl)phthalate	355
Carbon Tetrachloride	6
Chloroform	6
Di-n-butylphthalate	355
Di-n-octylphthalate	355
Isophorone	3,300
Methylene Chloride	10.5
<u>Radionuclides:</u>	<u>pCi/g</u>
Am-241	.5
Co-60	50.3
Cs-134	.5
Cs-137	2,000
Eu-154	1.08
Pu-238	.3
Pu-239/240	.4
Sr-90	2,280
U-234	1.4
U-238	1.3
Gross Alpha	40
Gross Beta	6,640

Table 2-4. Sampling and Analysis Plan Table for chemical and radiological analysis of OU 2-05 Track 2 TRA-15 hot waste underground storage tanks.

SAP Number: OU2-05-15
 SAP Table No. 1
 Date: 05/25/93 Revision: 2.0

SAMPLING AND ANALYSIS PLAN TABLE FOR CHEMICAL AND RADIOLOGICAL ANALYSIS
 Project: OU 2-05 TRACK 2 - TRA-15 HOT WASTE UNDERGROUND STORAGE TANKS

Page 1 of 3
 Project Manager: J. J. JESSMORE
 Form No: SAP11B

SAMPLE DESCRIPTION					PLANNED DATE	SAMPLE LOCATION				ENTER ANALYSIS TYPES (AT) AND QUANTITY REQUESTED																			
SAMPLING ACTIVITY	SAMPLE TYPE	MEDIA	COLL TYPE	SAMPLING METHOD		AREA	LOCATION	TYPE OF LOCATION	DEPTH (ft)	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT8	AT9	AT10	AT11	AT12	AT13	AT14	AT15	AT16	AT17	AT18	AT19	AT20
										AB	AM	C1	CM	CV	OH	OS	R4	T1	TV										
21B001	REG	SURFACE SOIL	GRAB	GRAB	05/24/93	TRA-15	BOREHOLE 3	UST SITE	0-0.5	1							1												
21B002	REG/OC	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	1-5	2	2	2		2		2	2												
21B003	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	5-7	1	1	1		1		1	1												
21B004	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	9-11	1	1	1		1		1	1												
21B005	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	13-15	1	1	1		1		1	1												
21B006	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	17-19	1	1	1		1		1	1												
21B007	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	21-23	1	1	1	1		1		1												
21B008	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	25-27	1	1	1		1		1	1												
21B009	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	29-31	1	1	1		1		1	1												
21B010	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	33-35	1	1	1		1		1	1												
21B011	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	37-39	1	1	1		1		1	1												
21B012	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	41-43	1	1	1		1		1	1												
21B013	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	45-47	1	1	1		1		1	1												
21B014	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 3	UST SITE	49-51	1	1	1		1		1	1												
21B015	OC	WATER	RNST		05/24/93	TRA-15	BOREHOLE 3	OC - RINSATE	N/A	1	1	1		1		1	1												

Enter the appropriate analysis type code in the boxes between the double lines under "ENTER ANALYSIS TYPES". Refer to SAP Table 2, Sampling And Analysis Plan Table - Codes & Descriptions.
 Enter the number of bottles in the single line boxes below the analysis type for each sampling activity.
 Any descriptions for non-standard analysis types (not given in SAP Table 2) should be entered under "COMMENTS" on the lines below.

AT1: Gross A/B, Sr-90/Am-241/Pu-150/U-150
 AT2: Anions
 AT3: CLP Metals
 AT4: CLP Volatiles - MS/MSD
 AT5: CLP Volatiles
 AT6: CLP Semivolatiles - MS/MSD
 AT7: CLP Semivolatiles
 AT8: Gamma Screen/Spectroscopy
 AT9: ICLP Metals
 AT10: ICLP Volatiles

125 mL, 125 mL VM Glass Jar (fill completely) (soil)
120 mL, 125 mL VM Glass Jar (soil)
120 mL, 125 mL VM Glass Jar (soil)
125 mL, 125 mL VM Glass Jar (fill completely) (soil)
125 mL, 125 mL VM Glass Jar (fill completely) (soil)
250 mL, 250 mL VM Glass Jar (fill completely) (soil)
250 mL, 250 mL VM Glass Jar (fill completely) (soil)
120 mL, 120 mL Gamma Spec Container (fill completely) (soil)
500 mL, 500 mL VM Glass Jar (fill completely) (soil)
250 mL, 250 mL VM Glass Jar (fill completely) (soil)

COMMENTS

DIC = Depth Integrated Composite
SS = Split Spoon
A Gamma Screen will not be performed on RINSATE and FIELD BLANK samples.
* Critical sample

Table 2-4. (continued).

SAP Number: OU2-05-15

SAP Table No. 1

Date: 05/25/93

Revision: 2.0

SAMPLING AND ANALYSIS PLAN TABLE FOR CHEMICAL AND RADIOLOGICAL ANALYSIS

Project: OU 2-05 TRACK 2 - TRA-15 HOT WASTE UNDERGROUND STORAGE TANKS

Project Manager: J. J. JESSMORE

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Form No: SAP11B

SAMPLE DESCRIPTION					PLANNED DATE	SAMPLE LOCATION				ENTER ANALYSIS TYPES (AT) AND QUANTITY REQUESTED																			
SAMPLING ACTIVITY	SAMPLE TYPE	MEDIA	COLL TYPE	SAMPLING METHOD		AREA	LOCATION	TYPE OF LOCATION	DEPTH (ft)	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT8	AT9	AT10	AT11	AT12	AT13	AT14	AT15	AT16	AT17	AT18	AT19	AT20
										AB	AN	C1	CH	CV	OH	OS	R4	T1	TV										
21B016	REG/OC	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	13-17	2	2	2		2		2	2												
21B017	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	17-19	1	1	1		1		1	1												
21B018	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	21-23	1	1	1	1		1		1												
21B019	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	25-27	1	1	1		1		1	1												
21B020	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	29-31	1	1	1		1		1	1												
21B021	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	33-35	1	1	1		1		1	1												
21B022	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	37-39	1	1	1		1		1	1												
21B023	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	41-43	1	1	1		1		1	1												
21B024	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	45-47	1	1	1		1		1	1												
21B025	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 2	UST SITE	49-51	1	1	1		1		1	1												
21B026	QC	WATER	RWST		05/24/93	TRA-15	BOREHOLE 2	QC - RINSATE	N/A	1	1	1		1		1	1												
21B027	REG/OC	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	13-17	2	2	2		2		2	2												
21B028	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	17-19	1	1	1		1		1	1												
21B029	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	21-23	1	1	1	1		1		1												
21B030	REG	SURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	23-25	1	1	1		1		1	1												

Enter the appropriate analysis type code in the boxes between the double lines under "ENTER ANALYSIS TYPES". Refer to SAP Table 2, Sampling And Analysis Plan Table - Codes & Descriptions.
 Enter the number of bottles in the single line boxes below the analysis type for each sampling activity.
 Any descriptions for non-standard analysis types (not given in SAP Table 2) should be entered under "COMMENTS" on the lines below.

A11: Gross A/B, Sr-90/Am-241/Pu-Iso/U-Iso
 A12: Anions
 A13: CLP Metals
 A14: CLP Volatiles - MS/MSD
 A15: CLP Volatiles
 A16: CLP Semivolatiles - MS/MSD
 A17: CLP Semivolatiles
 A18: Gamma Screen/Spectroscopy
 A19: TCLP Metals
 A110: TCLP Volatiles

125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 120 mL, 125 mL VM Glass Jar (soil)
 120 mL, 125 mL VM Glass Jar (soil)
 125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)
 120 mL, 120 mL Gamma Spec Container (fill completely) (soil)
 500 mL, 500 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)

COMMENTS

DIC = Depth Integrated Composite
 SS = Split Spoon
 A Gamma Screen will not be performed on RINSATE and FIELD BLANK samples.
 * Critical sample

Table 2-4. (continued).

SAP Number: DU2-05-15
 SAP Table No. 1
 Date: 05/25/93 Revision: 2.0

SAMPLING AND ANALYSIS PLAN TABLE FOR CHEMICAL AND RADIOLOGICAL ANALYSIS
 Project: DU 2-05 TRACK 2 - TRA-15 HOT WASTE UNDERGROUND STORAGE TANKS

Project Manager: J. J. JESSMORE

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SAMPLE DESCRIPTION					PLANNED DATE	SAMPLE LOCATION				ENTER ANALYSIS TYPES (AT) AND QUANTITY REQUESTED																			
SAMPLING ACTIVITY	SAMPLE TYPE	MEDIA	COLL TYPE	SAMPLING METHOD		AREA	LOCATION	TYPE OF LOCATION	DEPTH (ft)	AT1	AT2	AT3	AT4	AT5	AT6	AT7	AT8	AT9	AT10	AT11	AT12	AT13	AT14	AT15	AT16	AT17	AT18	AT19	AT20
										AB	AN	CI	CM	CV	OH	OS	R4	TI	TV										
218031	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	25-27	1	1	1		1		1	1												
218032	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	29-31	1	1	1		1		1	1												
218033	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	33-35	1	1	1		1		1	1												
218034	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	37-39	1	1	1		1		1	1												
218035	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	41-43	1	1	1		1		1	1												
218036	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	45-47	1	1	1		1		1	1												
218037	REG	SUBSURFACE SOIL	DIC	SS	05/24/93	TRA-15	BOREHOLE 1	UST SITE	49-51	1	1	1		1		1	1												
218038	QC	WATER	RNST		06/24/93	TRA-15	BOREHOLE 1	QC - RINSATE	N/A	1	1	1		1		1	1												
218039	QC	SCS-03	SCM		05/24/93	TRA-15	QC	SITE CHAR. MAT.	N/A			2																	
218040	QC	SCS-0-01	SCM		05/24/93	TRA-15	QC	SITE CHAR. MAT.	N/A							2													
218041	QC	WATER	TBLK		05/24/93	TRA-15	QC	TRIP BLANK	N/A					3															
218042	QC	WATER	FBLK		05/24/93	TRA-15	QC	FIELD BLANK	N/A	3	3	3	1	2	1	2	3												
218043	REG	SOIL	COMP		05/24/93	TRA-15	BOREHOLE 1,2,3	FIELD COMPOSITE	N/A									1	1										
218044	QC	WATER	DCOM		05/24/93	TRA-15	BOREHOLE 1,2,3	FIELD COMPOSITE	N/A	1	1	1		1		1	1												

Enter the appropriate analysis type code in the boxes between the double lines under "ENTER ANALYSIS TYPES". Refer to SAP Table 2, Sampling And Analysis Plan Table - Codes & Descriptions.
 Enter the number of bottles in the single line boxes below the analysis type for each sampling activity.
 Any descriptions for non-standard analysis types (not given in SAP Table 2) should be entered under "COMMENTS" on the lines below.

AT1: Gross A/B, Sr-90/Am-241/Pu-Is0/U-Is0
 AT2: Anions
 AT3: CLP Metals
 AT4: CLP Volatiles - MS/MSD
 AT5: CLP Volatiles
 AT6: CLP Semivolatiles - MS/MSD
 AT7: CLP Semivolatiles
 AT8: Gamma Screen/Spectroscopy
 AT9: TCLP Metals
 AT10: TCLP Volatiles

125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 120 mL, 125 mL VM Glass Jar (soil)
 120 mL, 125 mL VM Glass Jar (soil)
 125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 125 mL, 125 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)
 120 mL, 120 mL Gamma Spec Container (fill completely) (soil)
 500 mL, 500 mL VM Glass Jar (fill completely) (soil)
 250 mL, 250 mL VM Glass Jar (fill completely) (soil)

COMMENTS

DIC = Depth Integrated Composite
 SS = Split Spoon
 A Gamma Screen will not be performed on RINSATE and FIELD BLANK samples.
 * Critical sample

Other deviations were generated by field conditions:

- Due to the lack of sufficient sample matrix due to poor recovery in the split spoon sampler, additional intervals were sampled, as determined by the field team leader, to achieve adequate coverage of the boreholes.
- Even though depth to basalt was estimated at 10 m (35 ft), sample numbers were allocated in the SAP table to a depth of 15.5 m (51 ft) as a precaution. These additional numbers were not used because basalt was encountered in all three completed holes before the 15.5-m (51-ft) depth was reached.
- The need for BH #2A was not anticipated. The additional borehole necessitated assigning a new series of sample numbers in the field.

Deviations were also generated by labeling errors. Appendix A presents a comparison of samples planned, as presented in the revised SAP table of 5/25/93, and actual samples.

The SOW indicates that the three planned boreholes will be located as follows: One 5 ft from the drain, one west of the basin, and one east of the basin. The SAP indicates that surface samples were to be collected at an exact location to be determined in the field. The FTL was to base the location on surface survey results to maximize detection of contamination as close to the basin as possible on the south side. Although the location of BH #3 is not a deviation from the SAP, it is a minor deviation to the SOW.

2.2 Summary of OU 2-05 Site TRA-15 Risk Assessment

A human health risk assessment was conducted for the TRA OU 2-05 site TRA-15 (see Figure 2-4) according to the guidance for Track 2 low probability hazard sites at the INEL (DOE, 1993).

2.2.1 Risk Assessment Methodology

2.2.1.1 Contaminant Screening. Validated^a maximum sample analysis results are used for contaminant screening. Screening is initially performed on the basis of available background levels (see Table 2-6). Based on these levels, 11 potential contaminants were eliminated from consideration (aluminum, cadmium, cobalt, copper, iron, magnesium, manganese, nickel, potassium, sodium, and vanadium). According to DOE (1993), arsenic has background levels that exceed the maximum concentration measured at the site. These background levels were not used to screen arsenic from the risk assessment because they were determined using inductively-coupled plasma (ICP) elements, a method that produces uncertain results. For information, the

a. The validation process, which included 100% of the data addressed here, involves a screening process where results are assigned to less-than-detection if they are less than 10 times the associated blank concentrations for common laboratory contaminants, and less than five times the associated blank for other contaminants. Contaminants with only less-than-detectable sample results are not included in the risk analysis. The validation process also identifies data that should be rejected based on other quality parameters; these data are also excluded from the risk analysis.

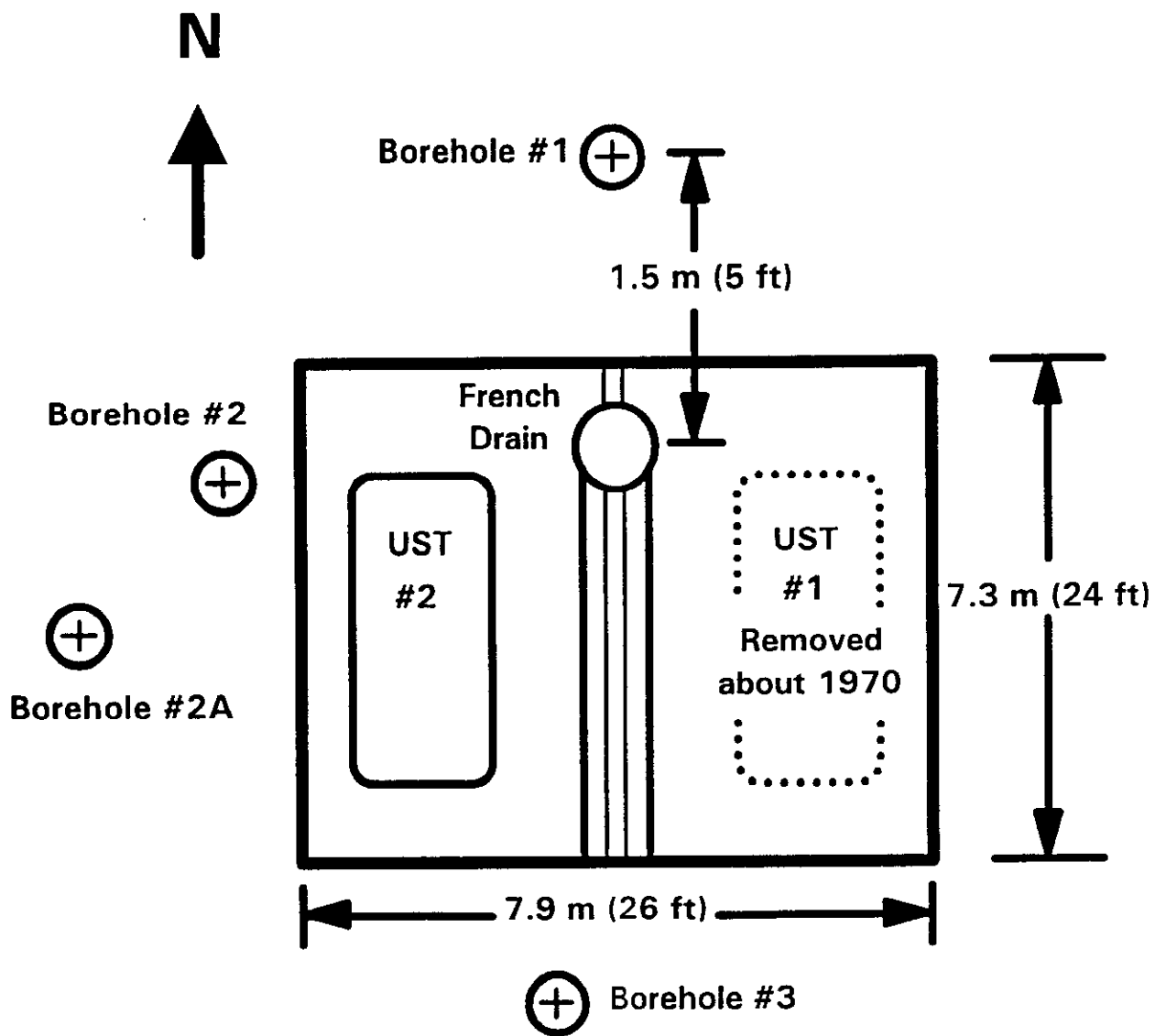


Figure 2-4. Plan view of the TRA-15 hot waste storage tank enclosure.

Table 2-6. Comparison of maximum detected concentrations and screening levels for TRA-15 hot waste storage tanks.

Contaminant ^a	Toxicity values available (Y/N)	Range of sample results (mg/kg or pCi/g)	Background screening level (INEL) ^b (mg/kg or pCi/g)	Baseline screening level (TRA) ^b (mg/kg or pCi/g)	Contaminant screened (omitted) (Y/N)	Number of undetect sample results
Aluminum	N	7,760 - 2,640	16,200	14,850	Y	
Arsenic	Y	10 - 2.1	NAV ^c	NAV	N	
Barium	Y	241 - 4.1	233	238	N	4
Beryllium	Y	1.2 - 0.5	1.5	1.2	N	23
Cadmium	Y	1.5 - 0.5	5.3	2.45	Y	16
Calcium	N	127,000 - 1,180	15,000	19,050	N	7
Chromium	Y	31 - 4.45	35.1	23.5	N	4
Cobalt	Y	7.6 - 2.7	10.8	8.8	Y	7
Copper	Y	18 - 7.9	59.9	20.1	Y	
Iron	Y	14,000 - 6,200	23,900	21,500	Y	
Lead	N	225 - 4.9	57	41.5	N	
Magnesium	N	5,210 - 1,055	11,000	6,485	Y	7
Managanese	Y	364 - 67.5	636	466	Y	5
Mercury	Y	0.06 - 0.03	0.06	0.06	N	23
Nickel	Y	22 - 7.1	36.5	23.05	Y	7
Potassium	N	1,530 - 189	5,180	3,850	Y	7
Sodium	N	167 - 23.8	192	222	Y	14
Vanadium	Y	32.6 - 13	37.1	44.2	Y	
Zinc	Y	98.8 - 11.8	184	93.8	N	7
Chloride	N	5.75 - 0.54	NAV	NAV	N	9
Fluoride	Y	2.16 - 0.77	NAV	NAV	N	
Nitrate	Y	3.06 - 0.32	NAV	NAV	N	
Phosphate	N	0.88 - 0.05	NAV	NAV	N	4
Sulfate	N	34.1 - 5.4	NAV	NAV	N	6
Acetone	Y	18 - 6	NAV	NAV	N	14
Bis(2-ethylhexyl) pthlalate	Y	355 - 74	NAV	NAV	N	19
Carbon Tetrachloride	Y	6 - 2	NAV	NAV	N	16
Chloroform	Y	6 - 2	NAV	NAV	N	12
Di-n-butyiphtalate	Y	355 - 40	NAV	NAV	N	19

Table 2-5. (continued).

Contaminant ^a	Toxicity values available (Y/N)	Range of sample results (mg/kg or pCi/g)	Background screening level (INEL) ^b (mg/kg or pCi/g)	Baseline screening level (TRA) ^b (mg/kg or pCi/g)	Contaminant screened (omitted) (Y/N)	Number of undetect sample results
Di-n-octylphthalate	Y	355 - 150	NAV	NAV	N	19
Isophorone	Y	3,300 - 170	NAV	NAV	N	19
Methylene Chloride	Y	10.5 - 2	NAV	NAV	N	16
Am-241	Y	0.5 - 0.05	0.004 ^d	NAV	N	21
Co-60	Y	50.3 - 0.21	NAV	NAV	N	
Cs-134	Y	0.5 - 0.31	NAV	NAV	N	
Cs-137	Y	2,000 - 0.07	0.78 ^d	NAV	N	
Eu-154	Y	1.08 - 0.5	NAV	NAV	N	
Pu-238	Y	0.3 - 0.5	0.0013 ^d	NAV	N	21
Pu-239/240	Y	0.4 - 0.05	0.021 ^d	NAV	N	21
Sr-90	Y	2,280 - 0.05	0.3 ^d	NAV	N	13
U-234	Y	1.4 - 0.6	NAV	NAV	N	1
U-238	Y	1.3 - 0.6	1.5 ^e	NAV	N	8
Gross Alpha	N	40 - 8	15.8 ^f	NAV	N	
Gross Beta	N	6,640 - 22	25.4 ^f	NAV	N	

a. Contaminant list excludes contaminants for which U or R qualifiers were present on all sample results. List also excludes tentatively identified compounds.

b. From DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL*, Draft, DOE/ID-10389, August 1993. Values are 90th percentiles unless otherwise noted.

c. NAV = Not Available.

d. From DOE, *The Idaho National Engineering Laboratory Site Environmental Report for Calendar Year 1992*, DOE/ID-12082(92), June 1993. Values are geometric means with 95% confidence interval for the mean.

e. Average from Hoff et al., *The Idaho National Engineering Laboratory Site Environmental Report for Calendar Year 1990*, DOE/ID-12082(90), June 1990.

f. From personal communication from D.A. Anderson, September 1993. Values derived from geometric average of radionuclides in INEL surface soils reported in ERDA, *1976 Environmental Monitoring Report*, IDO-12082(76), May 1977.

maximum sample results for both gross alpha and gross beta contamination are included in Table 2-6. All of the radionuclides at the site exceed background levels, and there are no background levels available for the organic compounds detected. A list of contaminants analyzed in this risk assessment is given in Tables 2-7a and 2-7b.

Following background screening, minimum risk-based soil concentrations were compared to the maximum sample results for each contaminant. These risk-based concentrations are based on a lifetime excess cancer risk of $1\text{E-}06$ for carcinogens and a hazard quotient of 1.0 for noncarcinogens. One contaminant (arsenic) has maximum sample results that exceed risk-based soil concentrations. Methodology for determining the risk-based soil concentrations is discussed in subsequent sections, and minimum risk-based soil concentrations are provided in Table 2-8. Several tentatively identified compounds (TICs) were found at the site but were not included in the risk assessment due to a lack of information about the compounds.

2.2.1.2 Toxicity Assessment. Toxicity data and other contaminant-specific factors used in the risk assessment are provided in Tables 2-7a and 2-7b. EPA-approved slope factors and reference doses from the 1992 EPA Health Effects Assessment Summary Tables (HEAST) (EPA, 1992a) and the EPA Integrated Risk Information System (IRIS) data base are used to assess lifetime excess cancer risk and hazard quotients. The oral reference dose for mercury is under review by EPA. Detectable amounts of five contaminants (chloride, orthophosphate, sulfate, calcium, and lead) were found at the site, but they were not included in the risk assessment since toxicity data for the contaminants are not available. The maximum sample results for lead at the site are below the cleanup criteria of 500–1,000 mg/kg established by the EPA.

2.2.1.3 Exposure Assessment. The site is located 4 m (13 ft) below ground surface, so the only exposure scenario considered is for a resident who moves to the site in 30 years and lives there for 30 years. An occupational scenario is not considered because the site is inaccessible from the surface. Also, no consideration is given to whether the site's resident digs into the soil since the only complete pathway for exposure is from groundwater ingestion (see Table 2-9). No time constraints apply to the groundwater ingestion pathway; average groundwater concentrations are used with standard exposure factors (EPA, 1991) to assess risk for the 30-year time period in which the peak occurs.

From the sample data, 95% upper confidence limits (UCLs) for the average soil concentration of each contaminant, calculated according to Superfund supplemental guidance on calculating the concentration term (EPA, 1992b), are used for risk calculations. For all samples reported with less-than-detectable levels of contamination, one half of the sample quantitation limits are used for UCL calculations. If the 95% UCL is greater than the maximum sample concentration, the maximum concentration is used in the assessment, per the Superfund guidance on calculating the concentration term.

Table 2-10 contains soil data and summary statistics for contaminants analyzed in this risk assessment. For each contaminant, a statistical analysis was performed using the Shapiro-Wilk W statistic to determine the type of distribution (normal or lognormal) that best fit the contaminant's sample results. The null hypothesis for the Shapiro-Wilk test is that the data come from a normal or lognormal distribution. This hypothesis is rejected in favor of lack of normality and lack of lognormality if the p-value associated with the W statistic is less than 0.05. For data that

Table 2-7a. Contaminant-specific parameters for organics and inorganics at TRA-15 hot waste storage tanks.

Contaminant	SF oral ^a (mg/kg-day) ⁻¹	RfD oral ^a (mg/kg-day)	Allowable water ^b concentration (noncarc) (mg/L)	Allowable water ^c concentration (carc) (mg/L)	Solubility ^d limit in water (mg/L)	K _d (cm ³ /g)
Acetone	ND ^e	1.00E-01	3.70E+00	ND	Infinite ^f	6.60E-03 ^{g,h}
Bis(2-ethylhexyl)phthalate	1.40E-02	2.00E-02	7.40E-01	6.07E-03	2.85E-01	1.77E+01 ^{g,h}
Carbon tetrachloride	1.30E-01	7.00E-04	2.59E-02	6.54E-04	7.57E+02	3.30E-01 ^{g,h}
Chloroform	6.10E-03	02	3.70E-01	1.39E-02	8.20E+03	1.41E-01 ^{g,h}
Di-n-butylphthalate	ND	1.00E-01	3.70E+00	ND	1.30E+01	5.10E+02 ^{g,h}
Di-n-octylphthalate	ND	2.00E-02	7.40E-01	ND	3.00E+00	2.40E+01 ^{h,i}
Isophorone	9.50E-04	2.00E-01	7.40E+00	8.95E-02	ND ^f	6.01E-01 ^{h,j}
Methylene chloride	7.50E-03	6.00E-02	2.22E+00	1.13E-02	2.00E+04	2.64E-02 ^{g,h}
Arsenic	1.75E+00	3.00E-04	1.11E-02	4.86E-05	ND ^f	3.00E+00 ^k
Barium	ND	7.00E-02	2.59E+00	ND	ND ^f	5.00E+01 ^k
Beryllium	4.30E+00	5.00E-03	1.85E-01	1.98E-05	ND ^f	2.50E+02 ^k
Chromium	ND	1.00E+00	3.70E+01	ND	ND ^f	1.20E+00
Flouride	ND	6.00E-02	2.22E+00	ND	ND ^f	0.00E+00 ^k
Mercury	ND	3.00E-04 ^l	1.11E-02	ND	3.00E-02	1.00E+02 ^k
Nitrate	ND	1.60E+00	5.92E+01	ND	ND ^f	7.00E-03 ^{h,i}
Zinc	ND	5.00E-02	1.85E+00	ND	ND ^f	1.60E+01 ^k

a. Slope factor, reference dose and allowable water concentration are from EPA database IRIS unless otherwise noted.

b. Noncarcinogenic allowable water concentration = oral RFD × 37 (DOE, 1993).

c. Allowable water concentration calculated by 8.5E-05/(oral SF) for nonradioactive carcinogens and 4.8E-11/(oral SF) for radioactive carcinogens (DOE, 1993).

d. From EPA, *Basics of Pump-and-Treat Groundwater Remediation Technology*, EPA/600/8-90/003, 1991.

e. No data.

f. For GWSCREEN runs, a conservatively high solubility limit of 1E+06 mg/L was used due to lack of other data.

g. Calculated from K_{oc} values listed in EPA, *Basics of Pump-and-Treat Groundwater Remediation Technology*, EPA/600/8-90/003, 1991.

h. Calculational methods were taken from Lyman, W.J., Reehl, W.F., and Rosenblatt, D.H., *Handbook of Chemical Property Estimation Methods*, American Chemical Society, Washington, DC, 1990.

i. Calculated from solubility value listed in EPA, *Basics of Pump-and-Treat Groundwater Remediation Technology*, EPA/600/8-90/003, 1991.

j. Calculated from K_{ow} value listed in EPA, *Handbook of RCRA Groundwater Monitoring Constituents Chemical and Physical Properties (40 CFR Part 264, Appendix 9)*, PB92-233287, June 1992.

k. From DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL (Draft)*, DOE/ID-10389, August 1993.

l. Under review.

Table 2-7b. Contaminant-specific parameters for radionuclides at TRA-15 hot waste storage tanks.

Contaminant	SF oral ^a (pCi) ⁻¹	Allowable water ^b concentration (Ci/L)	K _d ^c (cm ³ /g)	Half-life ^a (yr)
Am-241	2.40E-10	2.00E-13	3.40E+02	4.32E+02
C0-60	1.50E-11	3.20E-12	1.00E+01	5.27E+00
Cs-134	4.10E-11	1.17E-12	5.00E+02	2.07E+00
Cs-137	2.80E-11	1.71E-12	5.00E+02	3.02E+01
Eu-154	3.00E-12	1.60E-11	1.00E-02	8.80E+00
Pu-238	2.20E-10	2.18E-13	2.20E+01	8.77E+01
Pu-239	2.30E-10	2.09E-13	2.20E+01	2.41E+04
Pu-240	2.30E-10	2.09E-13	2.20E+01	6.57E+03
Sr-90	3.60E-11	1.33E-12	2.40E+01	2.86E+01
U-234	1.60E-11	3.00E-12	6.00E+00	2.45E+05
U-238	2.80E-11	1.71E-12	6.00E+00	4.68E+09

a. From EPA, Health Effects Assessment Summary Tables, FY 1992 Annual, OHEA-ECAO-CIN-821, March 1992. Oral slope factors for Sr-90 and U-238 include effects of daughter products.

b. Allowable water concentration calculated by $4.8\text{E-}11/(\text{oral SF})$ for radioactive carcinogens (DOE, 1993).

c. From DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL (Draft)*, DOE/ID-10389, August 1993. Value for Eu-154 taken from Baes, C.F. and Sharp, R.D., *A Proposal for Estimation of Soil Leaching and Leaching Constants for Use in Assessment Models*, Journal of Environmental Quality, 12(1), 1983.

Table 2-8. Risk-based screening criteria summary table.

OU: 2-05 Site: TRA-15 Hot Waste Storage Tanks													
Contaminant	Residential Scenario												Minimum SC
	Soil Ingestion			Inhalation of Dust			Inhalation of Volatiles		Groundwater Ingestion			External Exposure	
	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at HQ=1	SC at 1E-06 risk	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at 1E-06 risk	
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	2.18E+04	NA	NA	NA	2.18E+04
Bis-phthalate	NA	NA	NA	NA	NA	NA	NA	NA	2.94E+04	2.41E+02	NA	NA	2.41E+02
Carbontetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	1.42E+02	3.58E+00	NA	NA	3.58E+00
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	3.13E+02	1.18E+01	NA	NA	1.18E+01
Di-n-butylphthalate	NA	NA	NA	NA	NA	NA	NA	NA	5.49E+06	NA	NA	NA	5.49E+06
Di-n-octylphthalate	NA	NA	NA	NA	NA	NA	NA	NA	5.18E+04	NA	NA	NA	5.18E+04
Isophorone	NA	NA	NA	NA	NA	NA	NA	NA	4.19E+04	5.07E+02	NA	NA	5.07E+02
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	1.28E+04	6.53E+01	NA	NA	6.53E+01
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	7.44E+01	3.26E-01	NA	NA	3.26E-01
Barium	NA	NA	NA	NA	NA	NA	NA	NA	2.82E+05	NA	NA	NA	2.82E+05
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	1.00E+05	1.07E+01	NA	NA	1.07E+01
Chromium	NA	NA	NA	NA	NA	NA	NA	NA	1.09E+05	NA	NA	NA	1.09E+05
Fluorine	NA	NA	NA	NA	NA	NA	NA	NA	1.29E+03	NA	NA	NA	1.29E+03
Mercury	NA	NA	NA	NA	NA	NA	NA	NA	2.41E+03	NA	NA	NA	2.41E+03
Nitrate	NA	NA	NA	NA	NA	NA	NA	NA	3.52E+04	NA	NA	NA	3.52E+04
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	5.83E+04	NA	NA	NA	5.83E+04
Am-241	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.30E+05	NA	3.30E+05
Co-60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**	NA	**
Cs-134	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**	NA	**
Cs-137	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**	NA	**
Eu-154	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.45E+02	NA	6.45E+02
Pu-238	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.27E+05	NA	1.27E+05
Pu-239	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.37E+01	NA	1.37E+01
Pu-240	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.50E+01	NA	1.50E+01
Sr-90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.57E+15	NA	1.57E+15
U-234	NA	NA	NA	NA	NA	NA	NA	NA	2.53E+07	NA	4.08E+01	NA	4.08E+01
U-238	NA	NA	NA	NA	NA	NA	NA	NA	1.36E+03	NA	2.31E+01	NA	2.31E+01

NA = not applicable.
 HQ = hazard quotient.
 SC = soil concentration. Concentrations given in mg/kg for nonradioactive contaminants and in pCi/g for radioactive contaminants.
 ** = decays before reaching groundwater.

Table 2-9. Pathway and release mechanism assessment.

Date: 10/93

OU: 2-05 Site: TRA-15 Hot Waste Storage Tanks Pathway/receptor: All pathways/current occupational, future residential				
Source discussion/justification	Current source by media	Release mechanism → exposure route	Scenario/Pathway discussion	Data needs
Site is buried 13 ft, so contamination is inaccessible from the surface and cannot be reached by digging a 10 ft basement.	Air	Volatilization → inhalation	Pathway is incomplete	No
Site is buried 13 ft, so contamination is inaccessible from the surface and cannot be reached by digging a 10 ft basement.	Air	Suspension → inhalation	Pathway is incomplete	No
Site is buried 13 ft, so contamination is inaccessible from the surface and cannot be reached by digging a 10 ft basement.	Soil	Suspension → ingestion	Pathway is incomplete	No
Site is buried 13 ft, so contamination is inaccessible from the surface and cannot be reached by digging a 10 ft basement.	Soil	Radiation → external exposure	Pathway is incomplete	No
Contaminants in soil are available for leaching	Groundwater	Leaching to groundwater → groundwater ingestion	Pathway is complete	No
Summary of Table 5: Groundwater ingestion is the only complete pathway				
Notes:				

Table 2-10. Soil data and summary statistics for OU 2-05, TRA-15 hot waste storage tanks.

Contaminant	Type of source	Type of distribution	95% UCL
Acetone	Cone	Log normal	1.10E+01 $\mu\text{g/kg}$
Bis(2-ethylhexyl)phthalate	Surface	Normal	2.05E+02 $\mu\text{g/kg}$
Carbon tetrachloride	Cone	Normal	5.24E+00 $\mu\text{g/kg}$
Chloroform	Surface	Normal	4.70E+00 $\mu\text{g/kg}$
Di-n-butylphthalate	Cone	Normal	2.01E+02 $\mu\text{g/kg}$
Di-n-octylphthalate	Cone	Normal	2.03E+02 $\mu\text{g/kg}$
Isophorone	Cone	Normal	6.14E+02 $\mu\text{g/kg}$
Methylene chloride	Cone	Normal	6.88E+00 $\mu\text{g/kg}$
Arsenic	Surface	Log normal	4.28E+00 mg/kg
Fluoride	Surface	Log normal	1.62E+00 mg/kg
Nitrate	Surface	Log normal	2.00E+00 mg/kg
Barium	Surface	Log normal	1.24E+02 mg/kg
Beryllium	Surface	Normal	6.20E-01 mg/kg
Chromium	Surface	Normal	1.82E+01 mg/kg
Mercury	Surface	Normal	3.00E-02 mg/kg
Zinc	Surface	Log normal	5.07E+01 mg/kg
Am-241	Cone	Normal	1.30E-01 pCi/g
Co-60	Surface	Log normal	5.36E+00 pCi/g
Cs-134	Surface	Log normal	5.10E-01 pCi/g
Cs-137	Cone	Log normal	2.45E+02 pCi/g
Eu-154	Surface	Normal	5.70E-01 pCi/g
Pu-238	Cone	Normal	9.00E-02 pCi/g
Pu-239/Pu-240	Cone	Normal	1.00E-01 pCi/g
Sr-90	Cone	Normal	4.70E+02 pCi/g
U-234	Surface	Log normal	1.54E+00 pCi/g
U-238	Surface	Log normal	1.27E+00 pCi/g

produced p-values greater than 0.05 for both normal and lognormal cases, the distribution with the higher p-value was assigned to the data. If there were not enough data to give a p-value greater than 0.05 for either case, the data were assumed to fit a normal distribution in accordance with EPA guidance (EPA, 1992b). Once a distribution was assigned to each contaminant's data, a 95% UCL was calculated for the data in accordance with EPA guidance (EPA, 1992b). Consideration was also given to whether the contaminant originated from the site's leaking storage tank (cone source) or whether it migrated down to the site from the surface (surface source). The type of source (see Figure 2-5) controlled the volume of soil used to calculate the mass of contaminant present and the infiltration rate, moisture content, and receptor distance used in the contaminant transport calculations.

The code GWSCREEN, Version 2.02 (Rood, 1993), is used for all groundwater calculations, and output is provided in Appendix A. Groundwater transport parameters, used as inputs to the model and specified in the draft Track 2 guidance (DOE, 1993), along with other site-specific dimensions used in exposure calculations, are provided in Table 2-11. Groundwater flow direction is assumed to be parallel to the long dimension of the site.

The effects of progeny due to radioactive decay are not included in this risk assessment with the exception that the oral slope factors for Sr-90 and U-238 include the effects of some daughter products (Y-90 and Th-234, Pa-234 respectively).

Equations used for determining contaminant intake are provided in Table 2-12 and are derived from DOE (1993).

2.2.2 Data Evaluation

2.2.2.1 Contaminants/Parameters of Concern. This site was contaminated by a leak in an underground storage tank used to hold radionuclide-contaminated liquids and chemicals from laboratory analyses. In addition, surface spills of various chemicals have contributed contamination to the site due to infiltration of the chemicals into the site's soil. The site is defined as starting 4 m (13 ft) underground, so the surface chemicals are not part of the site. However, for completeness, the effects of chemicals that leached from the surface and passed across the 4 m site boundary are included in this risk assessment. Since the surface contamination is not addressed in this assessment, except as it affects the groundwater ingestion pathway, the risk calculated in this assessment represents only a portion of the total risk to a receptor at this site.

Table 2-10 shows which contaminants were assumed to have originated from the surface. The determination of a contaminant's origin was made by comparing the concentrations of the contaminant in samples above 4 m (13 ft) (taken from borehole 3) to the concentrations of the contaminant below 4 m (taken from borehole 1). If there was no increase in the containment concentrations inside the french drain cone, as compared to the surface soil, the contaminant was assumed to have originated from the surface.

The 26 chemicals and radionuclides listed in Tables 2-7a and 2-7b were discovered in detectable amounts around the tank basin.

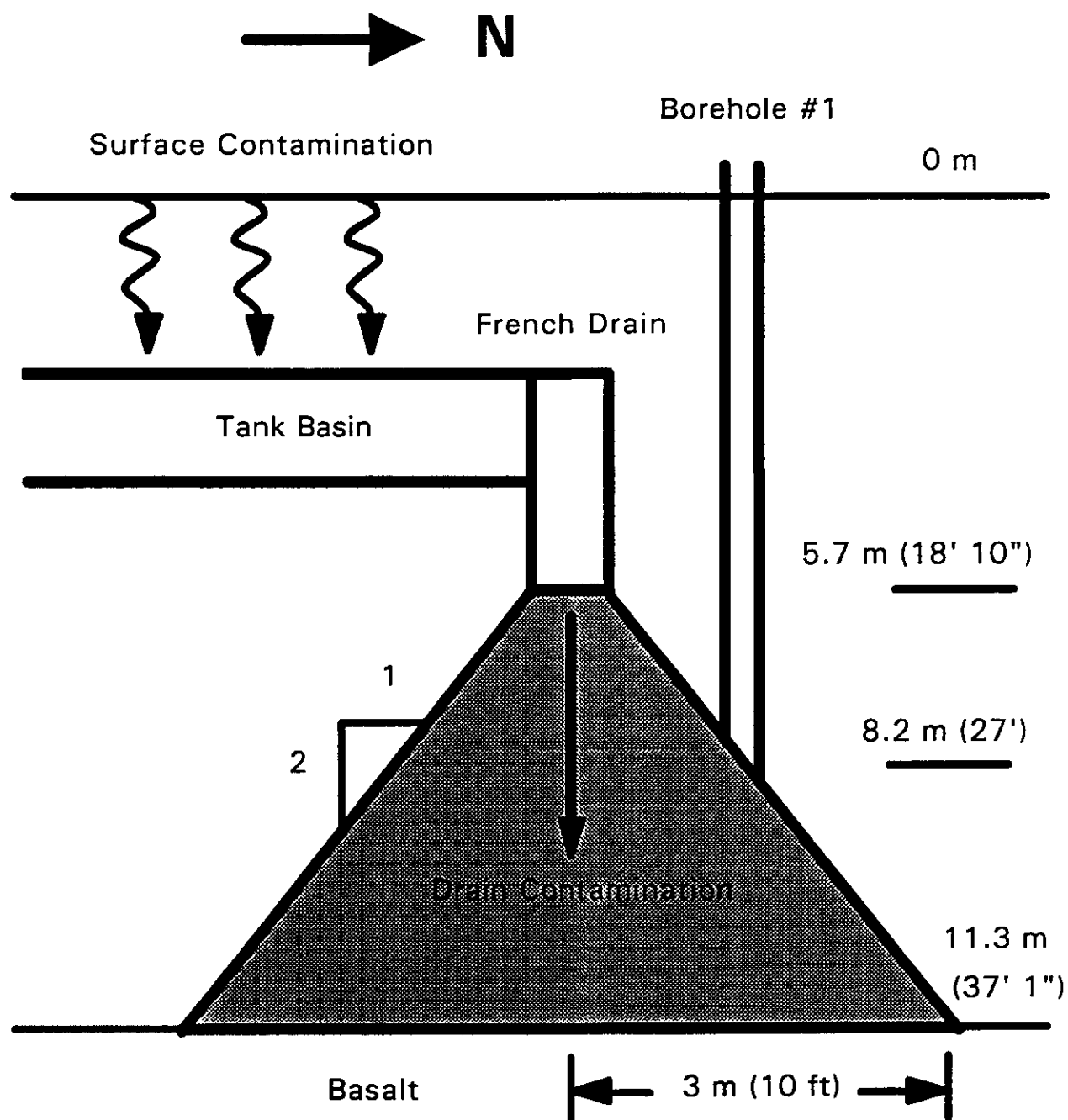


Figure 2-5. Cross-sectional view of contamination beneath the french drain.

Table 2-11. Groundwater transport inputs used for groundwater ingestion risk assessment calculations for OU 2-05, TRA-15 hot waste storage tanks.

Parameter	Value
Aquifer:	
Pore velocity	478 m/yr ^a
Longitudinal dispersivity	9 m
Transverse dispersivity	4 m
Length of well screen	15 m
Dry bulk density	1.9 g/mL
Porosity	0.1
K _d	Contaminant specific ^b
Unsaturated zone:	
Net infiltration:	
Contaminants beneath french drain	1.67 m/yr
Surface contaminants	0.1 m/yr
Volumetric water content:	
Contaminants beneath french drain	0.37
Surface contaminants	0.3
Dry bulk density	1.9 g/mL
Depth to groundwater (1/10 depth to aquifer)	13.5 m ^c
K _d	Contaminant specific
Soil zone:	
Soil density	1.5 g/mL
Volumetric water content:	
Contaminants beneath french drain	0.34
Surface contaminants	0.3
Length of source parallel to flow:	
Contaminants beneath french drain	3.05 m
Surface contaminants	11.0 m
Width of source perpendicular to flow:	
Contaminants beneath french drain	3.05 m
Surface contaminants	7.32 m
Thickness of contaminated zone:	
Contaminants beneath french drain	4.39 m
Surface contaminants	11.3 m
Solubility limit	Contaminant specific
K _d	Contaminant specific
Receptor distance downgradient:	
Contaminants beneath french drain	1.52 m
Surface contaminants	5.5
Receptor distance perpendicular to flow	0 m
Integration time	30 yr

a. EG&G Idaho (1992b).

b. For a given contaminant, the same K_d is used for the aquifer, unsaturated zone, and soil zone.

c. From *Record of Decision, Test Reactor Area Perched Water System, OU 2-12, INEL*, December 1992 the depth to groundwater at TRA is 146 m (480 ft). Subtracting the depth of contamination, 11.3 m (37 ft 1 in.) and dividing by 10 gives a depth of approximately 13.5 m (44 ft 3.5 in.).

Table 2-12. Table of summary intake factors for risk assessment.^a

Exposure pathways	Scenarios					
	Occupational			Residential		
	Nonradioactive contaminants ^b		Radioactive contaminants ^c	Nonradioactive contaminants ^b		Radioactive contaminants ^c
	Carcinogens	Noncarcinogens		Carcinogens	Noncarcinogens	
Soil ingestion	$C_s \times 1.7\text{E-}07$	$C_s \times 4.9\text{E-}07$	$C_s \times 3.1\text{E}02$	$C_s \times 1.6\text{E-}06$	$C_s \times 3.7\text{E-}06$	$C_s \times e^{-(0.693/t)T} \times 1.3\text{E}03$
Inhalation of fugitive dust	$\frac{C_s \times 7.0\text{E-}02}{\text{PEF}}$	$\frac{C_s \times 2.0\text{E-}01}{\text{PEF}}$	$\frac{C_s \times 1.2\text{E}08}{\text{PEF}}$	$\frac{C_s \times 1.2\text{E-}01}{\text{PEF}}$	$\frac{C_s \times 2.7\text{E-}01}{\text{PEF}}$	$\frac{C_s \times e^{-(0.693/t)T} \times 2.1\text{E}08}{\text{PEF}}$
Inhalation of volatiles	$\frac{C_s \times 7.0\text{E-}02}{\text{VF}}$	$\frac{C_s \times 2.0\text{E-}01}{\text{VF}}$	NA	$\frac{C_s \times 1.2\text{E-}01}{\text{VF}}$	$\frac{C_s \times 2.7\text{E-}01}{\text{VF}}$	NA
Groundwater ingestion ^d	NA	NA	NA	$C_{wa} \times 1.2\text{E-}02$	$C_{wa} \times 2.7\text{E-}02$	$C_{wa} \times 2.1\text{E}04$
External exposure ^e	NA	NA	$C_s \times 5.7$	NA	NA	$C_s \times e^{-(0.693/t)T} \times 2.9\text{E}01$

a. All equations are: intake = $C_s \times$ summary intake factor. Equations are from DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL, DRAFT*, DOE/ID-10389, Revision 5, August 1993.

b. All intakes expressed as mg/kg-d.

c. Radionuclide ingestion and inhalation expressed as pCi; external exposure expressed as pCi-yr/g.

d. All equations are: intake = $C_{wa} \times$ summary intake factor; groundwater ingestion applies only to the residential scenario. Intake for radioactive contaminants omits a decay term because the concentration as computed by GWSCREEN accounts for decay.

e. Applies only to radioactive contaminants.

C_s = concentration of contaminant in soil
 t = radionuclide-specific half-life (yr)
 NA = not applicable
 PEF = soil-to-air respirable particulate emission factor
 C_{wa} = concentration of contaminant in water
 T = time until exposure begins (yr)

2.2.2.2 Nature of Source and Potential for Release of Contamination. There are two underground tank basins near TRA-15. When the tanks were installed, they were covered with backfill. Each basin contains two tanks, but only one of the tanks, tank #1, in the western-most basin leaked. When tank #1 was removed, contaminated materials were removed and the area was recovered with clean backfill. Only this basin is discussed in this risk assessment. The tank basin is located almost 5.8 m (19 ft) below ground surface. It has a concrete floor, but no roof, and a 3-ft dividing wall down its center. The basin was designed to funnel any leakage from its two storage tanks toward a french drain located at the basin's north wall. As the leaking tank drained, about half the basin's backfill (26.5 m^3 or 936 ft^3) is assumed to have come into contact with contamination before the liquid migrated into the vadose zone beneath the drain (since the basin's dividing wall would have prevented the spread of liquid into the half of the basin containing the nonleaking tank). The volume of contaminated soil below the drain is estimated by assuming the liquid spread out in a cone with its apex at the bottom of the french drain and its base at the top of the uppermost basalt layer (see Figure 2-5). Four boreholes were drilled around the tank basin, one to the north of the french drain (borehole 1), two to the west of the basin (boreholes 2 and 2A), and one to the south of the basin (borehole 3). The samples collected from borehole 1 near the french drain show relatively high contaminant concentrations at 8.2 m (27 ft). The slope between the bottom of the french drain and the 8.2-m depth in this borehole is about 2 to 1, so the side slope of the contamination cone beneath the french drain is assumed to be 2 to 1. This slope and a thickness of 5.9 m (19 ft 4 in.) between the bottom of the drain and the top of the first basalt layer gives the base of the cone an estimated 3.0 m (10 ft) radius and estimated volume of 14.3 m^3 . The total source volume for contaminants that originated from the leaking tank (i.e., half the basin volume plus the volume of contamination beneath the french drain) is estimated to be 40.8 m^3 .

In addition to the contamination below the french drain, the site also contains contamination leached from the surface. The surface area for this contamination is assumed to equal the surface area of the basin plus 3 m (10 ft) to the north, to cover the zone of contamination below the french drain (the site is only expanded to the north since the boreholes to the west and south of the basin did not reveal contamination caused by the leaking tank, and the nonleaking tank basin lies to the east). The depth of contamination is assumed to equal the depth to the first basalt layer, 11.3 m (37 ft 1 in), so the total soil volume for contaminants that originated from the surface is assumed to be 92.8 m^3 (328 ft^3).

The infiltration rate for the contaminants below the french drain is adjusted because water that would pass through the site if the basin were not present collects on the basin's concrete floor and flows through the french drain. To calculate an effective infiltration rate for the contaminants beneath the french drain, an infiltration rate of 10 cm/yr (3.9 in./yr) from the surface was used. From this infiltration rate, the volume of water that would be captured by the basin's concrete floor was calculated, then that volume was passed through the average cross-sectional area of the cone below the french drain. The resulting assumed infiltration rate for contaminants beneath the french drain is 50 cm/yr (20 in./yr). As shown in Rood (1993) and listed in Table 2-11, the soil moisture content for a 50 cm/yr infiltration rate is 0.37. The standard 10 cm/yr infiltration rate and moisture content of 0.3 is used for contaminants originating from the surface.

2.2.3 Risk Characterization

Table 2-13 shows the results of risk calculations based on the site's measured contaminant concentrations (i.e., forward risk calculations). Results are provided for all detectable contaminants at the site even though measured concentrations for all but one contaminant (arsenic) are below risk-based screening levels. Hazard quotients (HQs) shown in this table are the ratio of chronic daily intake to the noncarcinogenic reference dose for a contaminant, so a HQ greater than 1 indicates an exposure to the contaminant that is greater than the reference dose. Risk values are the product of chronic daily intake for a carcinogenic contaminant and the contaminant's slope factor.

All contaminants have HQs less than 1, but one contaminant (arsenic) has a risk greater than $1\text{E-}06$. The maximum concentration for arsenic occurs after 814 years and the associated risk is $1\text{E-}05$. HQs were calculated for the uranium isotopes (U-234 and U-238) to assess the noncarcinogenic effects of these nuclides.

2.2.4 Assessment of Uncertainty

The exposure assessment has uncertainty in groundwater contaminant transport calculations since these calculations use conservative input parameters. For example, a high solubility is used for all contaminants, so leaching of contaminants from the source volume is not limited by solubility. Similarly, the K_d values used in the transport modeling are generally conservatively low to allow the maximum amount of contaminant to be available for transport. K_d values for di-n-octylphthalate and isophorone are estimated from solubility and octanol-water partition coefficients using formulas given in Lyman (1990) since measured K_d values were not available. These conservative assumptions cause the groundwater ingestion risk calculations to be biased high. Irrespective of input values, GWSCREEN provides bounding estimates of impacts on groundwater rather than best estimates. The concentrations reported by GWSCREEN are those that would not be expected to be exceeded for the modeling conditions.

Conservative treatment of the volume of contaminated soil at the site also biases results high. For example, the gravel in half of the tank basin is assumed to be uniformly contaminated with chemicals that leaked from the storage tank even though the chemicals probably travelled directly from the leak location to the french drain without coming into contact with much of the gravel in the basin. Also, all of the soil above the first basalt layer is potentially contaminated so only one-tenth of the depth from the first basalt layer to the water table was used as an input to GWSCREEN. Additionally, contaminants that probably leached from the surface are included in the risk assessment even though the surface soil is not part of the site. This conservative treatment maximizes the potential risk to a receptor at the site.

Besides uncertainties in the exposure assessment, the risk characterization step has some associated uncertainty. Cancer risk totals from nonradiologic contaminants are conservative because slope factors are estimates of percentiles in the upper tails of the distributions, and additions of such percentiles overestimate the same percentile for the sum. Also, summing of hazard quotients for noncarcinogens gives equal weight to critical effects of varying toxicological significance (for instance, effects may be manifested in different target organs) and may not be appropriate.

Table 2-13. Post sampling evaluation.

OU: 2-05 Site: TRA-15 Hot Waste Storage Tanks							
Contaminant of concern	DQOs met?	Screening criteria		Current occupational hazard quotient/risk	Future residential hazard quotients/risk	Time to peak concentration (yr)	Uncertainty (high/med/low)
		INEL background	TRA baseline				
Acetone	Yes	No data	No data	NA/NA ^a	4E-06/NA	1.04E+01	Low ^c
Bis(2ethylhexyl)phthalate		No data	No data	NA/NA	7E-06/9E-10	4.60E+03	Low
Carbon tetrachloride		No data	No data	NA/NA	1E-04/5E-08	2.71E+01	Low
Chloroform		No data	No data	NA/NA	2E-05/5E-10	7.69E+01	Low
Di-n-butylphthalate		No data	No data	NA/NA	4E-08/NA	2.64E+04	Low
Di-n-octylphthalate		No data	No data	NA/NA	4E-06/NA	1.25E+03	Low
Isophorone		No data	No data	NA/NA	3E-05/3E-09	4.11E+01	Low
Methylene chloride		No data	No data	NA/NA	4E-06/8E-10	1.14E+01	Low
Arsenic	Yes	No data ^b	No data ^b	NA/NA	6E-02/1E-05	8.14E+02	Med ^f
Fluoride		No data	No data	NA/NA	2E-03/NA	4.06E+01	Low
Nitrate		No data	No data	NA/NA	8E-05/NA	4.24E+01	Low
Barium		233 mg/kg ^c	238 mg/kg ^c	NA/NA	4E-04/NA	1.29E+04	Low
Beryllium		1.50 mg/kg ^c	1.20 mg/kg ^c	NA/NA	6E-06/6E-08	6.45E+04	Low
Mercury		0.06 mg/kg ^c	0.06 mg/kg ^c	NA/NA	1E-05/NA	2.58E+04	Low
Zinc		184 mg/kg ^c	93.8 mg/kg ^c	NA/NA	8E-04/NA	4.14E+03	Low
Chromium		35.1 mg/kg ^c	23.5 mg/kg ^c	NA/NA	2E-04/NA	3.50E+02	Low
Am-241	Yes	No data	No data	NA/NA	NA/4E-13	5.33E+03	Low
Co-60		No data	No data	NA/NA	NA/None	NA	Low
Cs-134		No data	No data	NA/NA	NA/None	NA	Low
Cs-137		0.54 pCi/g ^d	No data	NA/NA	NA/None	NA	Low
Eu-154		No data	No data	NA/NA	NA/3E-10	4.31E+01	Low
Pu-238		3E-04 pCi/g ^d	No data	NA/NA	NA/6E-13	1.15E+03	Low
Pu-239		No data	No data	NA/NA	NA/7E-09	1.15E+03	Low
Pu-240		No data	No data	NA/NA	NA/7E-09	1.15E+03	Low
Sr-90		0.22 pCi/g ^d	No data	NA/NA	NA/2E-09	1.25E+03	Low

Table 2-13. (continued).

OU: 2-05 Site: TRA-15 Hot Waste Storage Tanks							
Contaminant of concern	DQOs met?	Screening criteria		Current occupational hazard quotient/risk	Future residential hazard quotient/risk	Time to peak concentration (yr)	Uncertainty (high/med/low)
		INEL background	TRA baseline				
U-234 U-238	Yes	No data No data	No data No data	NA/NA NA/NA	7E-13/4E-08 1E-08/6E-08	1.59E+03 1.59E+03	Low Low
Assumptions: Co-60, Cs-134 and Cs-137 have groundwater concentrations less than 1E-100 Ci/L, so the risk from these nuclides is assumed to be non-existent.							
Summary of Table 6: Arsenic has a risk greater than 1E-06.							
a. Not applicable. b. Background levels from Track 2 manual not used because of low confidence measurement method used. c. Values are 90th percentiles taken from Draft Track 2 manual (DOE 1993). See Table 2-6 for maximum sample results and Appendix A for risk-based soil concentrations. d. Values are lower limits of the 95% confidence interval for the geometric mean from draft Track 2 manual (DOE 1993). See Appendix A for risk-based criteria. e. Low uncertainty is assigned because the HQ/risk indicates that the contaminant does not present a potential risk. f. Arsenic was detected in all samples. However, no reliable background data are available.							

2.2.5 Summary of Potential Risk

The only pathway of potential concern for TRA-15 is the future residential groundwater ingestion pathway. All other pathways were eliminated because the contaminated soil is 4 m (13 ft) below the surface and unavailable for release. Risk calculations indicate that all contaminants at the site have hazard quotients less than 1. One contaminant, arsenic, has a risk greater than $1E-06$. Table 2-14 illustrates the qualitative risk and information reliability for this assessment.

Arsenic is present in background soils and was detected in all soil samples collected at TRA-15. The highest detected concentration was 10 mg/kg. According to Track 2 guidance (DOE, 1994), the 90th percentile and mean concentrations for arsenic at TRA are 28.9 and 24.35 ppm, respectively. These data were acquired using the inductively couple plasma technique, which has an artificially high detection level. Results must be applied with caution. For this reason, arsenic was not screened even though the maximum detection (10 mg/kg) at TRA-15 may be less than background. Using 10 mg/kg in the risk assessment modeling resulted in a risk of $1E-05$, with peak groundwater concentration occurring in 814 years.

Table 2-14. Qualitative risk and reliability evaluation table for TRA-15 in OU 2-05.

	QUALITATIVE RISK		
	Low	Medium	High
Highly unreliable	Screening data	TRACK 2	Screening data
Medium reliability	No Action Required	A	
Highly reliable	B	RI/FS	Interim Action
RELIABILITY	LOW concentration resulting in risk < 10^{-6}	MEDIUM	HIGH concentration resulting in risk > 10^{-4}
	Qualitative risk		

A. Arsenic has a $1\text{E-}05$ risk for future residential ingestion of groundwater. However, the risk may be significantly overstated since background values for arsenic exceed the highest detected concentrations at TRA-15 (see Section 2.2.5), resulting in a medium reliability.

B. Risk is low and information reliability is high for all other pathways and constituents.

3. TRA-16 UNDERGROUND STORAGE TANK SITE

3.1 OU 2-05 Site TRA-16 Track 2 Data Collection

3.1.1 TRA-16 Site Background and History

This site was the location of an inactive, radioactively contaminated 300-gal UST near TRA-614, as illustrated in Figure 3-1. The tank was probably installed in the late 1960s and abandoned in place in 1972. The tank received wastes from the metallurgy laboratory in TRA-614, and was connected to a hot sink and hood in the lab in which enriched uranium was handled. Solvents that were used to clean fuel plates may also have been disposed to the UST.

Tank contents were analyzed in 1989 for radioactive and nonradioactive constituents. Tables of the unvalidated analytical results appear on pages 2-10 and 2-11 in the SAP. Possible contaminants of concern were identified from the 1989 data, and Track 2 sampling focused on these constituents. The conceptual site model for TRA-16 (Figure 3-2) indicates that ingestion of groundwater, inhalation of volatile organic compounds, inhalation of contaminated fugitive dust, and external exposure to direct radiation are exposure pathways of concern for future residential receptors.

Since tank removal was scheduled for the 1993 field season, preliminary scoping rendered a recommendation to evaluate the tank site further after the tank had been removed and confirmation sampling was performed. The WAG managers agreed that Track 2 sampling was needed to confirm the uncontaminated status and to justify a recommendation for the site.

The CSM generated by preliminary scoping appears in Figure 3-2. All surface water releases were eliminated based on the absence of surface water at the site. Except for external exposure, all other occupational pathways, including "tracking" contamination on shoes, are limited to the top 6 in. of soil and eliminated on that basis. Residential pathways not related to surface water are all potentially complete.

3.1.2 TRA-16 Summary of Data Quality Objectives for Data Collection

Volatile and semivolatile organic compounds, metals, and alpha-, beta-, and gamma-emitting radionuclides were identified as contaminants of concern for TRA-16. DQOs focused on obtaining sufficient data to determine if contaminated soils exist at the site subsequent to implementing the tank removal process.

3.1.3 TRA-16 Summary of Data Collection

Data collection at TRA-16 consisted of three phases. First, the tank contents were sampled on April 22, 1993. Sampling was performed according to the draft SAP. The contents consisted of single phase with a measured depth in the tank of 58 cm (23 in.). Analytical results were used to plan subsequent tank removal and disposal of the tank and its contents. Analyses for radionuclides, metals, VOCs, and SVOCs were completed. Sample results appear in the SAP.

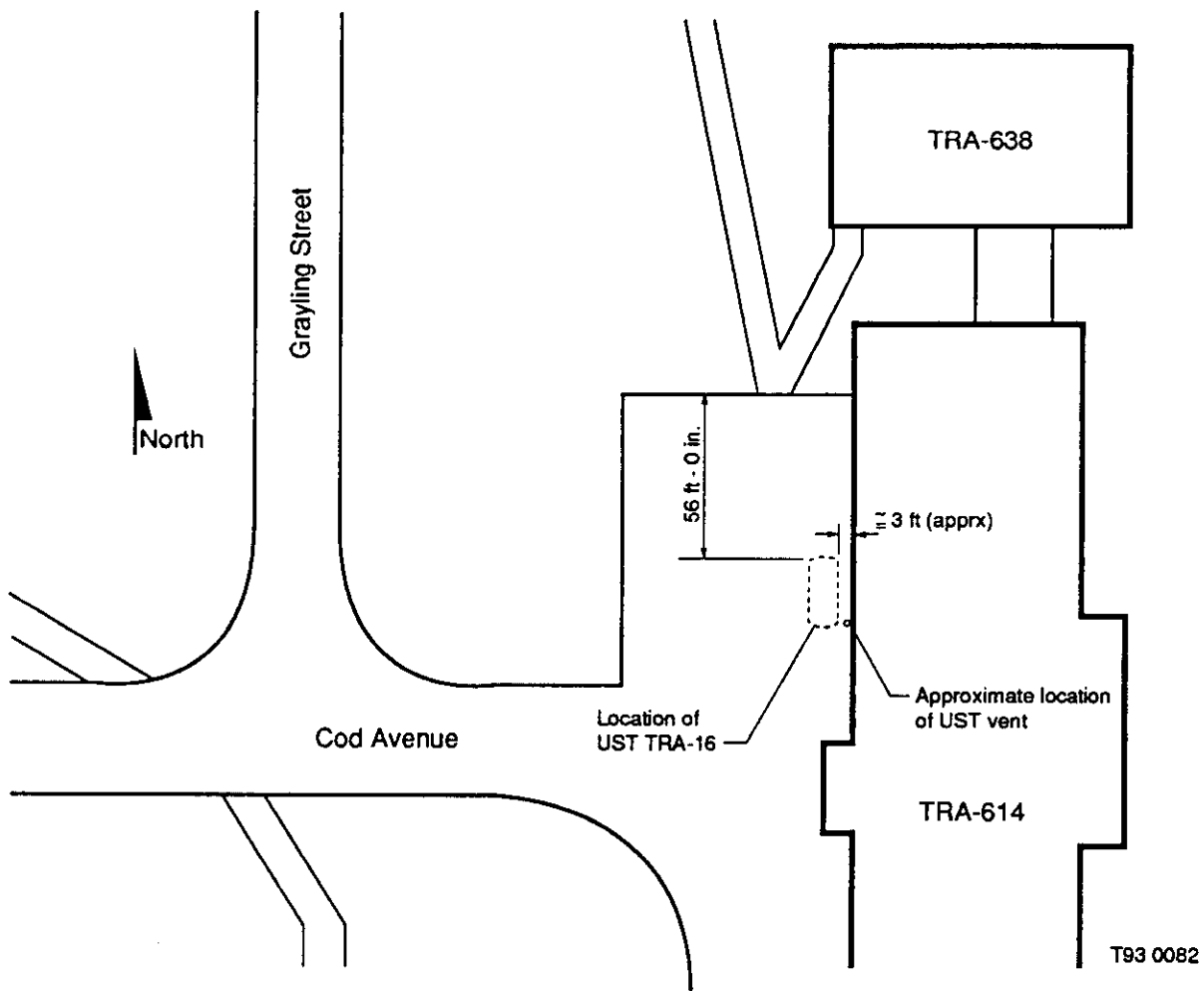


Figure 3-1. Location of UST TRA-16.

SITE CONCEPTUAL MODEL

OU 2-05 TRA-16 STORAGE TANK AT TRA-614

Potentially Complete Pathways

Ø - Break in Pathway

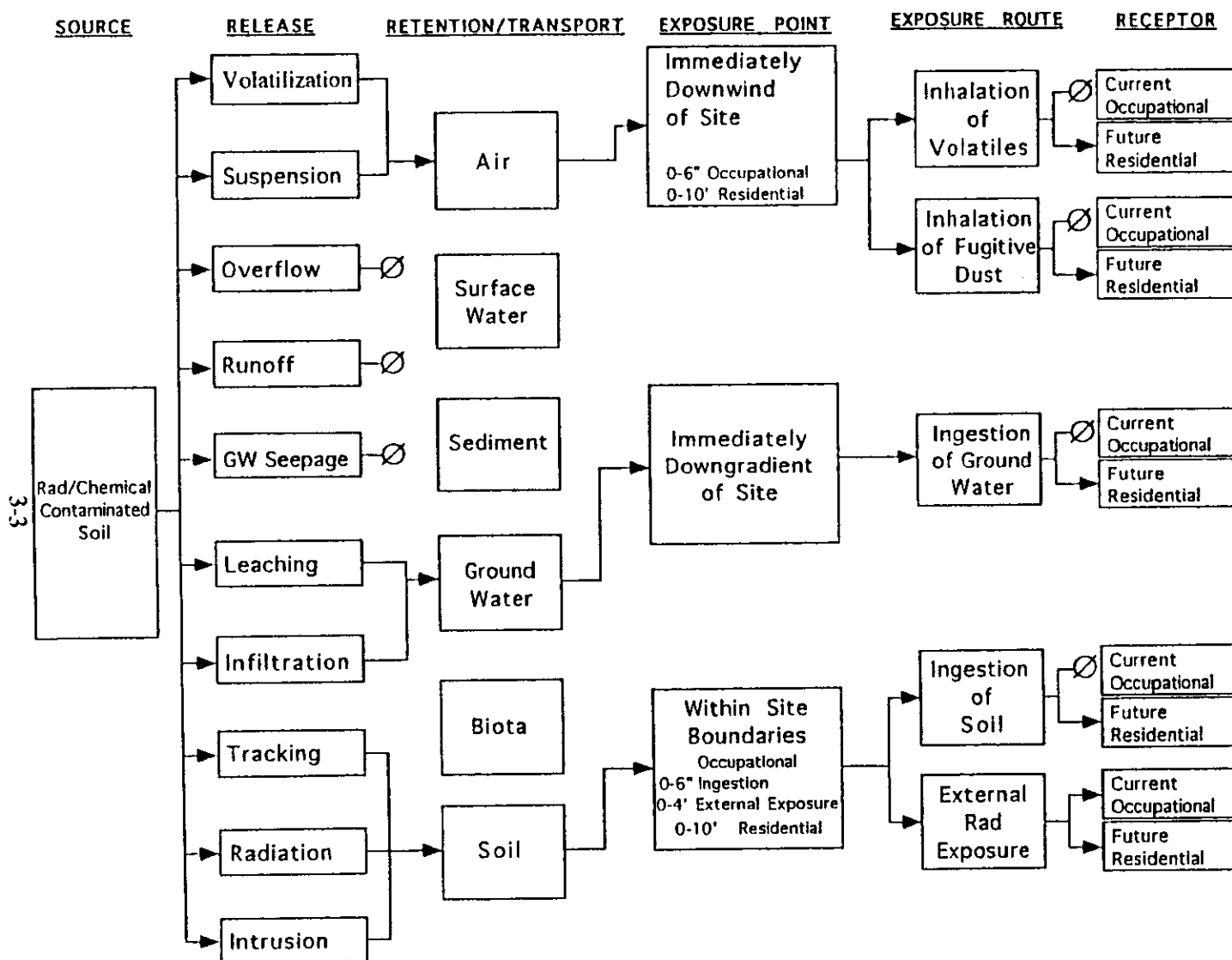


Figure 3-2. Site conceptual model showing potentially complete pathways of OU 2-05 TRA-16 Storage Tank soil contamination.

The second phase was the removal of the tank contents on August 6, 1993. The contents were successfully pumped out with only one minor product spill (one half cup or less) resulting from a broken pump hose. The spill was contained and resulted in no environmental contamination.

The tank removal and confirmation soil sampling were performed in the third phase. Prior to excavation, four borings were augered in the tank vicinity to depths ranging from 1.8 to 3 m (6 to 10 ft). Soils were surveyed for alpha, beta, and gamma activity; no activity was detected. Soils removed during the excavation were monitored with field screening equipment for VOCs and radioactivity. Background activity of 120 cpm β/γ was established. No activities above background were detected in the top of the excavation as the removal of the tank commenced except that a small amount of VOC contaminated soil was detected near the gauge port/stand pipe on the surface. The small amount of soil was removed and disposed.

When the tank was exposed, survey yielded readings of 300 cpm β/γ at the top of the tank, 3.75 ft below the surface. However, contamination was not detected in associated soils. The field team leader and RCT concluded that the elevated readings were radiating from within the tank itself. Monitoring continued as the tank was fully exposed. No VOCs or radioactivity were detected with field equipment.

The removal of UST TRA-614 at this site was completed on August 19, 1993. After the tank was removed, two soil samples were collected, one each from the north and south ends of the excavation base. Maximum concentrations from the validated laboratory analysis of the collected soil samples appear in Table 3-1. A complete list of the analytical data residing in the ERIS database for this sampling activity is included in Appendix B.

3.1.4 TRA-16 Deviations to the SAP

The contents of the tank were sampled in order to plan health and safety controls, to define waste handling criteria, and to characterize the contents for disposal purposes. However, due to inadequate sample volume, all analyses originally requested were not performed. Since the uncollected samples were for safety and disposal, not characterization, the DQOs for this project were not adversely impacted. Additional analyses of the contents were performed in December 1993 to complete plans for disposal.

No deviations to the SAP were identified for the tank removal procedure and confirmation sampling.

Table 3-1. Validated highest concentrations for constituents detected at TRA-16.

Contaminant	Highest detected concentration
<u>Metals:</u>	<u>(mg/kg):</u>
Aluminum	3240
Arsenic	5.2
Barium	57.6
Beryllium	0.89
Cadmium	1.4
Calcium	13700
Chromium	9.3
Cobalt	4.7
Copper	7.8
Iron	7120
Lead	6.3
Magnesium	3000
Manganese	145
Mercury	0.24
Nickel	12.8
Potassium	719
Thallium	0.21
Vanadium	21.7
Zinc	32.6
<u>Radionuclides:</u>	<u>pCi/g</u>
U-234	0.99
U-238	1.26
Gross Alpha	4
Gross Beta	3

3.2 Summary of OU 2-05 Site TRA-16 Risk Assessment

A human health risk assessment was conducted for TRA OU 2-05 site TRA-16 according to the guidance for Track 2 low probability hazard sites at the INEL (DOE, 1993).

3.2.1 Risk Assessment Methodology

3.2.1.1 Contaminant Screening. Validated^b maximum sample analysis results are used for contaminant screening. Screening is initially performed on the basis of available background levels (see Table 3-2). Based on these levels, 16 compounds were eliminated from consideration

b. The validation process, which included 100% of the data addressed here, involves a screening process where results are assigned to less-than-detection if they are less than 10 times the associated blank concentrations for common laboratory contaminants, and less than five times the associated blank for other contaminants. Contaminants with only less-than-detectable sample results are not included in the risk analysis. The validation process also identifies data that should be rejected based on other quality parameters; these data are also excluded from the risk analysis.

Table 3-2. Comparison of maximum detected concentrations and screening levels for TRA-16 storage tank.

Contaminant ^a	Toxicity values available (Y/N)	Range of sample results	Background screening level (INEL) ^b	Baseline screening level (TRA) ^b	Contaminant screened (omitted) (Y/N)	Number of undetected sample results
Aluminum	N	3,240 - 1,500 mg/kg	16,200 mg/kg	14,850 mg/kg	Y	
Arsenic	Y	5.2 - 1.3 mg/kg	NAV ^c	NAV	N	
Barium	Y	57.6 - 49.2 mg/kg	233 mg/kg	238 mg/kg	Y	
Beryllium	Y	0.89 - 0.85 mg/kg	1.5 mg/kg	1.2 mg/kg	Y	2
Cadmium	Y	1.4 - 1.1 mg/kg	5.3 mg/kg	2.45 mg/kg	Y	2
Calcium	N	13,700 - 9,060 mg/kg	15,000 mg/kg	19,050 mg/kg	Y	
Chromium	Y	9.3 - 2.2 mg/kg	35.1 mg/kg	23.5 mg/kg	Y	
Cobalt	Y	4.7 - 2.9 mg/kg	10.8 mg/kg	8.8 mg/kg	Y	
Copper	Y	7.8 - 1.7 mg/kg	59.9 mg/kg	20.1 mg/kg	Y	1
Iron	Y	7,120 - 4,840 mg/kg	23,900 mg/kg	21,500 mg/kg	Y	
Lead	Y	6.3 - 2.9 mg/kg	57.0 mg/kg	41.5 mg/kg	Y	
Magnesium	N	3,000 - 1,930 mg/kg	11,000 mg/kg	6,485 mg/kg	Y	
Manganese	Y	145 - 117 mg/kg	636 mg/kg	466 mg/kg	Y	2
Mercury	Y	0.24 - 0.2 mg/kg	0.06 mg/kg	0.06 mg/kg	N	
Nickel	Y	12.8 - 3.2 mg/kg	36.5 mg/kg	23.05 mg/kg	Y	
Potassium	N	719 - 362 mg/kg	5,180 mg/kg	3,850 mg/kg	Y	
Thallium	N	0.21 - 0.21 mg/kg	NAV	NAV	Y	2
Vanadium	Y	21.7 - 9.0 mg/kg	37.1 mg/kg	44.2 mg/kg	Y	2
Zinc	Y	32.6 - 22.2 mg/kg	184 mg/kg	93.8 mg/kg	Y	
U-234	Y	0.99 - 0.65 pCi/g	NAV	NAV	N	
U-238	Y	1.26 - 0.60 pCi/g	1.5 pCi/g ^d	NAV	N	
Gross Alpha	N	4.0 - 0.3 pCi/g	15.8 pCi/g ^e	NAV	NA	1
Gross Beta	N	3.0 - 0.8 pCi/g	25.4 pCi/g ^e	NAV	NA	2

a. Contaminant list excludes contaminants for which U or R qualifiers were present on all sample results. List also excludes tentatively identified compounds.

b. From DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL*, Draft, DOE/ID-10389, August 1993, unless otherwise noted. Values are 90th percentiles.

c. NAV = Not Available.

d. Average from Hoff et al., *The Idaho National Engineering Laboratory Site Environmental Report for Calendar Year 1990*, DOE/ID-12082(90), June 1990.

e. From personal communication from D.A. Anderson, September 1993. Values derived from geometric average of radionuclides in INEL surface soils reported in ERDA, *1976 Environmental Monitoring Report*, IDO-12082(76), May 1977.

in this risk assessment (aluminum, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc). Arsenic and mercury were the only nonradiologic compounds detected at the site in quantities that exceed background levels. According to DOE (1993), arsenic has background levels that exceed the maximum concentration measured at the site. These background levels were not used to screen arsenic from the risk assessment because they were determined using inductively coupled plasma (ICP) elements, a method that produces uncertain results.

The only radionuclides detected at the site were U-234 and U-238. Test Reactor Area soils have been analyzed for naturally occurring U-238 decay chain nuclides (EG&G Idaho, 1992a). The minimum background concentration reported for these decay chain nuclides is 14 pCi/g. This concentration is greater than the maximum concentration of U-238 detected at the TRA-16 site (1.26 pCi/g), but the TRA-16 samples were only analyzed for U-238 (not the entire U-238 decay chain). There is no available background data for U-234, so it is also analyzed in this risk assessment. For information, the maximum sample results and INEL background levels for both gross alpha and gross beta contamination are included in Table 3-2.

Following background screening, minimum risk-based soil concentrations were calculated using methods described in DOE (1993). These risk-based concentrations are based on a lifetime excess cancer risk of $1\text{E-}06$ for carcinogens and a hazard quotient of 1.0 for noncarcinogens and were compared to the maximum sample results for each contaminant. Two compounds (arsenic and U-238) have maximum sample results that exceed risk-based soil concentrations. Minimum risk-based soil concentrations are provided in Table 3-3. Several tentatively identified compounds were found at the site but were not included in the risk assessment due to a lack of information about the compounds.

3.2.1.2 Toxicity Assessment. EPA-approved slope factors and reference doses from the 1993 EPA Health Effects Assessment Summary Tables (HEAST) (EPA, 1992a) and the EPA Integrated Risk Information System (IRIS) database are used in the risk assessment and are presented in Tables 3-4a and 3-4b along with other contaminant-specific factors. The chemical form of the mercury discovered at the site is unknown, so toxicity values for both organic and inorganic mercury are presented in Tables 3-4a and 3-4b and used in the risk assessment. The oral reference dose for organic mercury is under review by EPA. Detectable amounts of thallium was found at the site, but it was not included in the risk assessment since toxicity data for the contaminant are not available.

3.2.1.3 Exposure Assessment. The inactive storage tank at TRA-16 was buried about 1.3 m (4 ft) below ground surface, so the only exposure scenario considered in this risk assessment is for a resident who moves to the site in 30 years, lives there for 30 years, and digs a 3-m (10-ft) basement (the residential intrusion scenario). Neither a residential nonintrusion nor an occupational scenario is considered because the site is inaccessible from the surface (i.e., there is no contamination in the top 6 in. of soil) (see Table 3-5). The complete exposure pathways for the residential intrusion scenario are soil ingestion, inhalation of fugitive dust, groundwater ingestion, and external radiation exposure. For the groundwater ingestion pathway, no time constraints apply; average groundwater concentrations are used with standard exposure factors (EPA, 1991) to assess risk for the 30-year time period in which the peak occurs.

Table 3-3. Risk-based screening criteria summary table.

OU: 2-05		Site: TRA-16 Storage Tank											
		Residential Scenario											
Contaminant	Soil Ingestion			Inhalation of Dust			Inhalation of Volatiles		Groundwater Ingestion			External Exposure	Minimum SC
	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at HQ=1	SC at 1E-06 risk	SC at HQ=1	SC at 1E-06 risk	SC at 1E-06 risk from rad.	SC at 1E-06 risk	
Arsenic	8.10E+01	3.66E-01	NA	NA	5.38E+05	NA	NA	NA	1.67E+03	7.32E+00	NA	NA	3.66E-01
Mercury	8.10E+01	NA	NA	1.01E+09	NA	NA	NA	NA	6.27E+04	NA	NA	NA	8.10E+01
U-234	5.06E+06	NA	4.94E+01	NA	NA	5.87E+05	NA	NA	4.52E+08	NA	8.55E+02	1.17E+03	4.94E+01
U-238	2.60E+02	NA	2.82E+01	NA	NA	2.93E+05	NA	NA	2.44E+04	NA	4.85E+02	9.72E-01	9.72E-01
NA = not applicable. HQ = hazard quotient. SC = soil concentration. Note: Concentrations given in mg/kg for nonradioactive contaminants and in pCi/g for radioactive contaminants.													

Table 3-4a. Contaminant-specific parameters for metals at TRA-16 storage tank.

Contaminant	SF oral ^a (per mg/kg-day)	RfD oral ^a inhalation (mg/kg-day)	RfD concentration (noncarc) (mg/kg-day)	Allowable water ^b concentration (carc) (mg/L)	Allowable water ^c limit in water (mg/L)	Solubility ^d (mg/L)	K _d (cm ³ /g)
Arsenic	1.75E+00	3.00E-04	ND ^e	1.11E-02	4.86E-05	ND ^e	3.00E+00 ^d
Organic mercury	ND ^e	3.00E-04 ^f	ND ^e	1.11E-02	ND ^e	3.00E-02	1.00E+02 ^d
Inorganic mercury	ND ^e	ND ^e	8.57E-05	1.11E-02	ND ^e	3.00E-02	1.00E+02 ^d

a. Slope factor and reference dose are from EPA database IRIS.

b. Noncarcinogenic allowable water concentration = oral RfD × 37 (DOE, 1993).

c. Allowable water concentration calculated by 8.5E-05/(oral SF) for nonradioactive carcinogens and 4.8E-11/(oral SF) for radioactive carcinogens (DOE, 1993).

d. From EPA, *Basics of Pump-and-Treat Groundwater Remediation Technology*, EPA/600/8-90/003, 1991.

e. No Data.

f. Under review.

Table 3-4b. Contaminant-specific parameters for radionuclides at TRA-16 storage tank.

Contaminant	SF oral ^a (per pCi)	SF inhalation ^a (per pCi)	SF external exposure ^a (per pCi)	Allowable water ^b concentration (Ci/L)	K _d ^c (cm ³ /g)	Half-Life ^a (yr)
U-234	1.60E-11	2.60E-08	3.00E-11	3.00E-12	6.00E+00	2.45E+05
U-238	2.80E-11	5.20E-08	3.60E-08	1.71E-12	6.00E+00	4.47E+09

a. From EPA, *Health Effects Assessment Summary Tables, Annual Update*, PB93-921199, March 1993.

b. Calculated from oral reference dose presented in EPA database IRIS.

c. From DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL (Draft)*, DOE/ID-10389, August 1993.

Table 3-5. Pathway and release mechanism assessment.

OU: <u>2-05</u> Site: <u>TRA-16 Storage Tank</u> Pathway/receptor: <u>All pathways/current occupational</u>				
Source discussion/justification	Current source by media	Release mechanism - exposure route	Scenario/Pathway discussion	Data needs
Tank was buried, so contamination is inaccessible from the surface.	Air	Volatilization - inhalation	Pathway is incomplete	No
Tank was buried, so contamination is inaccessible from the surface.	Air	Suspension - inhalation	Pathway is incomplete	No
Tank was buried, so contamination is inaccessible from the surface.	Soil	Suspension - ingestion	Pathway is incomplete	No
Tank was buried, so contamination is inaccessible from the surface.	Soil	Radiation - external exposure	Pathway is incomplete	No
Summary of Table 5: There are no complete pathways for the occupational scenario.				
Notes: 				

Table 3-5. (continued).

OU: 2-05 Site: TRA-16 Storage Tank Pathway/receptor: All pathways/future residential				
Source discussion/justification	Current source by media	Release mechanism - exposure route	Scenario/Pathway discussion	Data needs
There are no volatile contaminants at the site.	Air	Volatilization - inhalation	Pathway is incomplete	No
Contamination is accessible in a 10 ft basement.	Air	Suspension - inhalation	Pathway is complete	No
Contamination is accessible in a 10 ft basement.	Soil	Suspension - ingestion	Pathway is complete	No
Contamination is accessible in a 10 ft basement.	Soil	Radiation - external exposure	Pathway is complete	No
Contamination is available for leaching to groundwater.	Groundwater	Leaching - ingestion	Pathway is complete	No
Summary of Table 5: Inhalation of fugitive dust, soil ingestion, external radiation exposure and groundwater ingestion are complete pathways for the residential intrusion scenario.				
Notes:				

From the sample data, 95% upper confidence limits (UCLs) for the average soil concentration of each compound were calculated according to Superfund supplemental guidance on calculating the concentration term (EPA, 1992b). Since there are only three samples available for each compound, all sample results are assumed to be normally distributed. The calculated UCLs are greater than the maximum sample results for all four compounds, so the maximum sample results are used for risk calculations for all compounds, in accordance with EPA guidance (EPA, 1989).

The code GWSCREEN, Version 2.02 (Rood, 1993), is used for all groundwater calculations, and output is provided in Appendix B. Groundwater transport parameters, used as inputs to the model and specified in the draft Track 2 guidance, along with other site-specific parameters used in exposure calculations, are provided in Table 3-6. Groundwater flow direction is assumed to be parallel to the long dimension of the site. A conservatively high solubility limit of $1\text{E}+06$ was assumed for arsenic due to a lack of other information.

The effects of progeny due to radioactive decay are not included in this risk assessment with the exception that the oral slope factor used for U-238 includes the effects of some daughter products (Th-234 and Pa-234).

Equations used for determining contaminant intake are provided in Table 3-7 and are obtained from Rood (1993).

3.2.2 Data Evaluation

3.2.2.1 Contaminants/Parameters of Concern. The inactive waste storage tank at TRA-16 was buried about 1.3 m (4 ft) below ground surface. The tank was removed, and two soil samples were collected below the tank's bed, at a depth of 2.7 m (9 ft) below ground surface. Four compounds (arsenic, mercury, U-234, and U-238) were detected in these samples at levels that are above background.

3.2.2.2 Nature of Source and Potential for Release of Contamination. The waste storage tank was intact when it was removed from the ground, so the chances are small that the site was contaminated due to leakage from the tank. Contamination was discovered at the tank's gauge port/stand pipe, so there is a possibility of contamination from leakage during liquid removal operations. The small amount of contaminated soil around the gauge port/stand pipe was removed and is not included in this risk assessment.

For purposes of this risk assessment, the potentially contaminated soil volume is assumed to have dimensions of 1.8 m x 1.1 m x 10.0 m (6 ft x 3.6 ft x 32.8 ft). These dimensions are used because the tank has a cross-sectional area of 1.8 m x 1.1 m (6 ft x 3.6 ft) and the depth of soil from the top of the tank to the top of basalt layer that lies beneath TRA is 10.0 m (32 ft 10 in.) (assuming a uniform depth to basalt beneath TRA of 11.3 m, (37 ft)). This potentially contaminated soil volume is not accessible from the surface, but contamination is available to cause exposure to a future resident at the site who digs below the top 1.3 m (4 ft) of soil or who drinks groundwater that contains compounds leached from the site.

Table 3-6. Groundwater transport inputs used for groundwater ingestion risk assessment calculations for OU 2-05, TRA-16 storage tank.

Aquifer:

Pore velocity	478 m/yr ^a
Longitudinal dispersivity	9 m
Transverse dispersivity	4 m
Length of well screen	15 m
Dry bulk density	1.9 g/mL
Porosity	0.1
K ^d	Contaminant specific ^b

Unsaturated zone:

Net infiltration	0.1 m/yr
Volumetric water content	0.3
Dry bulk density	1.9 g/mL
Depth to groundwater (1/10 depth to aquifer)	13.5 m ^c
K ^d	Contaminant specific

Soil zone:

Soil density	1.5 g/mL
Volumetric water content	0.3
Length of source parallel to flow	1.8 m
Width of source perpendicular to flow	1.1 m
Thickness of contaminated zone	10.0 m
Solubility limit	Contaminant specific
K ^d	Contaminant specific

Receptor distance downgradient	0.9 m
Receptor distance perpendicular to flow	0 m

Integration time	30 yr

a. EG&G Idaho (1992b).

b. For a given contaminant, the same K^d is used for the aquifer, unsaturated zone, and soil zone.

c. From *Record of Decision, Test Reactor Area Perched Water System, OU 2-12, INEL, December 1992*, the depth to groundwater at TRA is 146 m (480 ft). Subtracting the depth of surface sediments, 11.3 m (37 ft 1 in.) and dividing by 10 gives a depth of approximately 13.5 m (44 ft 3.5 in.).

Table 3-7. Table of summary intake factors for risk assessment.^a

Exposure pathways	Scenarios					
	Occupational			Residential		
	Nonradioactive contaminants ^b		Radioactive contaminants ^c	Nonradioactive contaminants ^b		Radioactive contaminants ^c
	Carcinogens	Noncarcinogens		Carcinogens	Noncarcinogens	
Soil ingestion	$C_s \times 1.7\text{E-}07$	$C_s \times 4.9\text{E-}07$	$C_s \times 3.1\text{E}02$	$C_s \times 1.6\text{E-}06$	$C_s \times 3.7\text{E-}06$	$C_s \times e^{-(0.693/t)T} \times 1.3\text{E}03$
Inhalation of fugitive dust	$\frac{C_s \times 7.0\text{E-}02}{\text{PEF}}$	$\frac{C_s \times 2.0\text{E-}01}{\text{PEF}}$	$\frac{C_s \times 1.2\text{E}08}{\text{PEF}}$	$\frac{C_s \times 1.2\text{E-}01}{\text{PEF}}$	$\frac{C_s \times 2.7\text{E-}01}{\text{PEF}}$	$\frac{C_s \times e^{-(0.693/t)T} \times 2.1\text{E}08}{\text{PEF}}$
Groundwater ingestion ^d	NA	NA	NA	$C_{wa} \times 1.2\text{E-}02$	$C_{wa} \times 2.7\text{E-}02$	$C_{wa} \times 2.1\text{E}04$
External exposure ^e	NA	NA	$C_s \times 5.7$	NA	NA	$C_s \times e^{-(0.693/t)T} \times 2.9\text{E}01$

a. All equations are: intake = $C_s \times$ summary intake factor. Equations are from DOE, *Track 2 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL, DRAFT*, DOE/ID-10389, Revision 5, August 1993.

b. All intakes expressed as mg/kg-d.

c. Radionuclide ingestion and inhalation expressed as pCi; external exposure expressed as pCi-yr/g.

d. All equations are: intake = $C_{wa} \times$ summary intake factor; groundwater ingestion applies only to the residential scenario. Intake for radioactive contaminants omits a decay term because the concentration as computed by GWSCREEN accounts for decay.

e. Applies only to radioactive contaminants.

C_s = concentration of contaminant in soil
 t = radionuclide-specific half-life (yr)
 NA = not applicable
 PEF = soil-to-air respirable particulate emission factor
 C_{wa} = concentration of contaminant in water
 T = time until exposure begins (yr)

3.2.3 Risk Characterization

Table 3-8 summarizes the risks and hazard quotients by pathway. Table 3-9 shows the results of risk calculations based on the site's measured contaminant concentrations (i.e., forward risk calculations). Results are provided for all detectable compounds at the site even though measured concentrations for all but two compounds (arsenic and U-238) are below risk-based screening levels. Hazard quotients shown in this table are the ratio of chronic daily intake to the noncarcinogenic reference dose for a contaminant. Risk values are the product of chronic daily intake for a carcinogenic contaminant and the contaminant's slope factor.

3.2.4 Assessment of Uncertainty

The exposure assessment has uncertainty in groundwater contaminant transport calculations since these calculations use conservative input parameters. For example, conservatively high solubilities are used for all compounds, so leaching of compounds from the source volume is not limited by solubility. Similarly, the K_d values used in the transport modeling are generally conservatively low to allow the maximum amount of contaminant to be available for transport. These conservative assumptions cause the groundwater ingestion risk calculations to be biased high. The concentrations reported by GWSCREEN are those that would not be expected to be exceeded for the modeling conditions.

Besides uncertainties in the exposure assessment, the risk characterization step has some associated uncertainty. Cancer risk totals from nonradiologic compounds are conservative because slope factors are estimates of percentiles in the upper tails of the distributions, and additions of such percentiles overestimate the same percentile for the sum. Also, summing of hazard quotients for noncarcinogens gives equal weight to critical effects of varying toxicological significance (for instance, effects may be manifested in different target organs) and may not be appropriate.

3.2.5 Summary of Potential Risk

Occupational external exposure and all residential intrusion pathways (inhalation of volatile and fugitive dust, ingestion of groundwater, ingestion of soil, and external exposure) were evaluated in the risk assessment. All compounds analyzed have hazard quotients less than 1. Two compounds, arsenic and U-238, have risks greater than $1E-06$. Table 3-10 illustrates the qualitative risk and information reliability for this assessment.

Arsenic is present in background soils and was detected in both soil samples collected at TRA-16. The highest detected concentration was 5.2 mg/kg. According to Track 2 guidance (DOE, 1994), the 90th percentile and mean concentration for arsenic at TRA are 28.9 and 24.35 ppm, respectively. These data were acquired using the inductively couple plasma technique, which has an artificially high detection level. Results must be applied with caution. For this reason, arsenic was not screened even though the maximum detection of 5.2 mg/kg at TRA-16 may be less than background. Using 5.2 mg/kg in the assessment modeling resulted in a risk of $1E-05$ via the residential soil ingestion pathway.

Table 3-8. Pathway-specific risk and hazard quotient summary table.

OU: 2-05 Site: TRA-16 Storage Tank														
Contaminant	Residential Intrusion Scenario													
	Soil Ingestion			Inhalation of Dust			Inhalation of Volatiles		External Exposure	Groundwater Ingestion			Totals	
	HQ ^a	Cancer Risk	Rad Cancer Risk	HQ ^a	Cancer Risk	Rad Cancer Risk	HQ ^a	Cancer Risk	Rad Cancer Risk	HQ ^a	Cancer Risk	Rad Cancer Risk	HQ ^a	Cancer Risk
Arsenic	6E-02	1E-05	NA ^b	NA	1E-11	NA	NA	NA	NA	3E-03	6E-07	NA	7E-02	2E-05
Mercury	3E-03	NA	NA	2E-10	NA	NA	NA	NA	NA	4E-06	NA	NA	3E-03	NA
U-234	2E-07	NA	2E-08	NA	NA	2E-12	NA	NA	9E-10	2E-09	NA	1E-09	2E-07	2E-08
U-238	5E-03	NA	5E-08	NA	NA	4E-12	NA	NA	1E-06	5E-05	NA	2E-09	5E-03	1E-06
TOTAL	7E-02	1E-05	7E-08	2E-10	1E-11	6E-12	NA	NA	1E-06	3E-03	6E-07	3E-09	7E-02	2E-05
a. HQ = hazard quotient.														
b. NA = not applicable.														

Table 3-9. Post sampling evaluation.

OU: <u>2-05</u> Site: <u>TRA-16 Hot Waste Storage Tank</u>							
Contaminant of concern	DQOs met?	Screening criteria		Future residential intrusion scenario		Time to Peak Groundwater Concentration (yr)	Uncertainty (high/med/low)
		<u>INEL Background</u>	<u>TRA Baseline</u>	<u>Hazard Quotient</u>	<u>Risk</u>		
Arsenic	Yes	No data ^a	No data ^a	7E-02	2E-05	8.11E+02	Med ^c
Mercury	Yes	0.06 mg/kg ^b	0.06 mg/kg ^b	3E-03	NA	2.57E+04	Low ^d
U-234	Yes	No Data	No Data	2E-07	2E-08	1.58E+03	Low ^e
U-238	Yes	No Data	No Data	5E-03	1E-06	1.58E+03	Med ^f
Totals		NA	NA	7E-02	2E-05	NA	
Assumptions:							
Summary of Table 6: Arsenic and U-238 have risks greater than 1E-06.							
a. The Track 2 guidance manual lists background levels for arsenic, but these levels were not used because they were determined by a method that produces uncertain results.							
b. Values are 90th percentiles taken from Draft Track 2 Manual (DOE, 1993). See Table 3-2 for maximum sample results and Appendix A for risk-based criteria.							
c. Medium uncertainty is assigned because (a) arsenic was detected in both samples at 1.3–5.2 mg/kg, an order of magnitude greater than the risk-based soil concentration of 3.6E-01 for residential soil ingestion, generating a potential carcinogenic risk within the 1E-4 to 1E-6 range (see Tables 3-2 and 3-3), and (b) reliable background values for arsenic are not available.							
d. Low uncertainty is assigned because mercury was detected in both samples at concentrations much lower than the risk-based soil concentrations, generating a hazard quotient much smaller than unity.							
e. U-234 was detected in both samples at concentrations smaller than risk-based soil concentrations. Although no background data are available, the calculations for potential risk and hazard quotient indicate that this constituent is not a concern.							
f. U-238 was detected in both samples with concentrations higher than or the same order of magnitude as the risk-based soil concentrations. There are no background data.							

Table 3-10. Qualitative risk and reliability evaluation table for TRA-16 in OU 2-05.

	QUALITATIVE RISK		
	Low	Medium	High
	TRACK 2		
Highly unreliable	Screening data B		Screening data
Medium reliability	No Action Required	A	
Highly reliable		RI/FS	Interim Action
RELIABILITY	LOW concentration resulting in risk < 10^{-6}	MEDIUM	HIGH concentration resulting in risk > 10^{-4}
	Qualitative risk		

A. Arsenic and U-238 may present risks up to 1E-05 and 1E-06, respectively. However, both constituents may be present in concentrations less than background (see Section 3.2.5). Therefore, information reliability was rated as medium (see Table 3-9).

B. Risk is low and information reliability is high (Table 3-9 uncertainty is low) for mercury and U-234.

Uranium-238 was not screened because background data are pertinent to U-238 decay-chain nuclides; analyses of TRA-16 soils were performed for U-238, but not for the associated decay-chain nuclides. Background for the U-238 decay chain is greater than 14 pCi/g. The maximum concentration of U-238 detected at TRA-16 was 1.26 pCi/g. Risk assessment modeling with a concentration of 1.26 pCi/g resulted in a future residential external exposure risk of 1E-06.

4. TRA-19 CATCH TANKS

4.1 OU 2-05 Site TRA-19 Track 2 Data Collection

4.1.1 TRA-19 Site Background and History

This site is commonly referred to as the TRA Catch Tanks, and consists of four underground storage tanks contained in a concrete vault. Figure 4-1 indicates the location of the tanks within TRA. The original four tanks were replaced by new ones in 1985 and 1986. TRA-19 is defined as any environmental contamination resulting from releases associated with the original four tanks. The preliminary scoping resulted in a recommendation for no further action. Subsequent scoping meeting discussions determined that continuing Track 2 investigation would consist of further data search, in particular for health physics (HP) logbooks, to confirm the noncontaminated status of the site.

4.1.2 TRA-19 Summary of Data Quality Objectives for Data Collection

Track 2 sampling was not recommended for this site. However, it was determined that additional information should be obtained to document the noncontaminated status of soils associated with the site. Particular focus was on obtaining HP logs pertinent to the replacement of the catch tanks in 1985 and 1986.

The conceptual site model generated by the preliminary scoping appears in Figure 4-2. Future residential ingestion of groundwater is the only potentially complete pathway. All other pathways were eliminated either due to the absence of surface water or due to the depth to potential contamination.

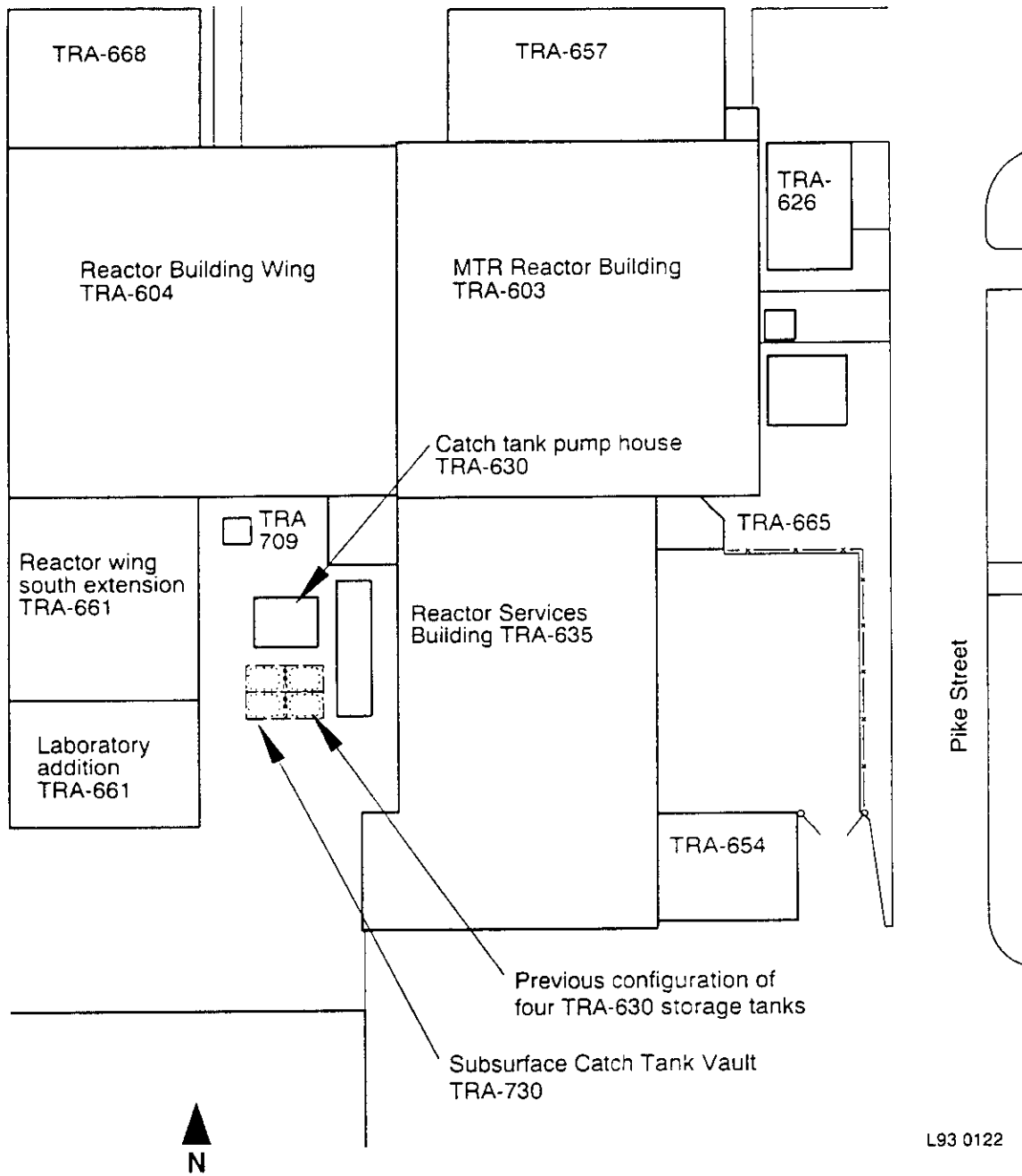
4.1.3 TRA-19 Summary of Data Collection

HP logs from 1985 (MTR, 1985) and 1986 (MTR, 1986) were located and reviewed for entries pertinent to the removal of the old catch tanks and installation of new ones. Appendix C contains a summary of the log entries. The closing entries discuss the draining of the tanks, implying that the tanks were intact when removed. However, specific observations of the condition of the tanks are not recorded.

The catch tank vault has been designated a high radiation zone. The HP logs contain numerous references to contamination from minor spills and subsequent clean up. Most of these spills occurred within the catch tank vault as a result of pipe cutting operations during tank removal or from reconnecting lines to the new tanks. However, the May 29, 1986 entry refers to an August 1985 incident concerning a damaged 4-in. drain line from TRA-641. It is not clear if the excavation that damaged the line was related to the replacement of the catch tanks. The line had been tagged out-of-service. Soil contamination was detected northwest of the catch tank vault around the drain line at 100 mrem/hr beta/gamma. The HP logs do not specifically address this particular contaminated soil any further.

4.1.4 TRA-19 Deviations to the SAP

No Track 2 sampling was performed for this site.



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Figure 4-1. Location of TRA-19 USTs.

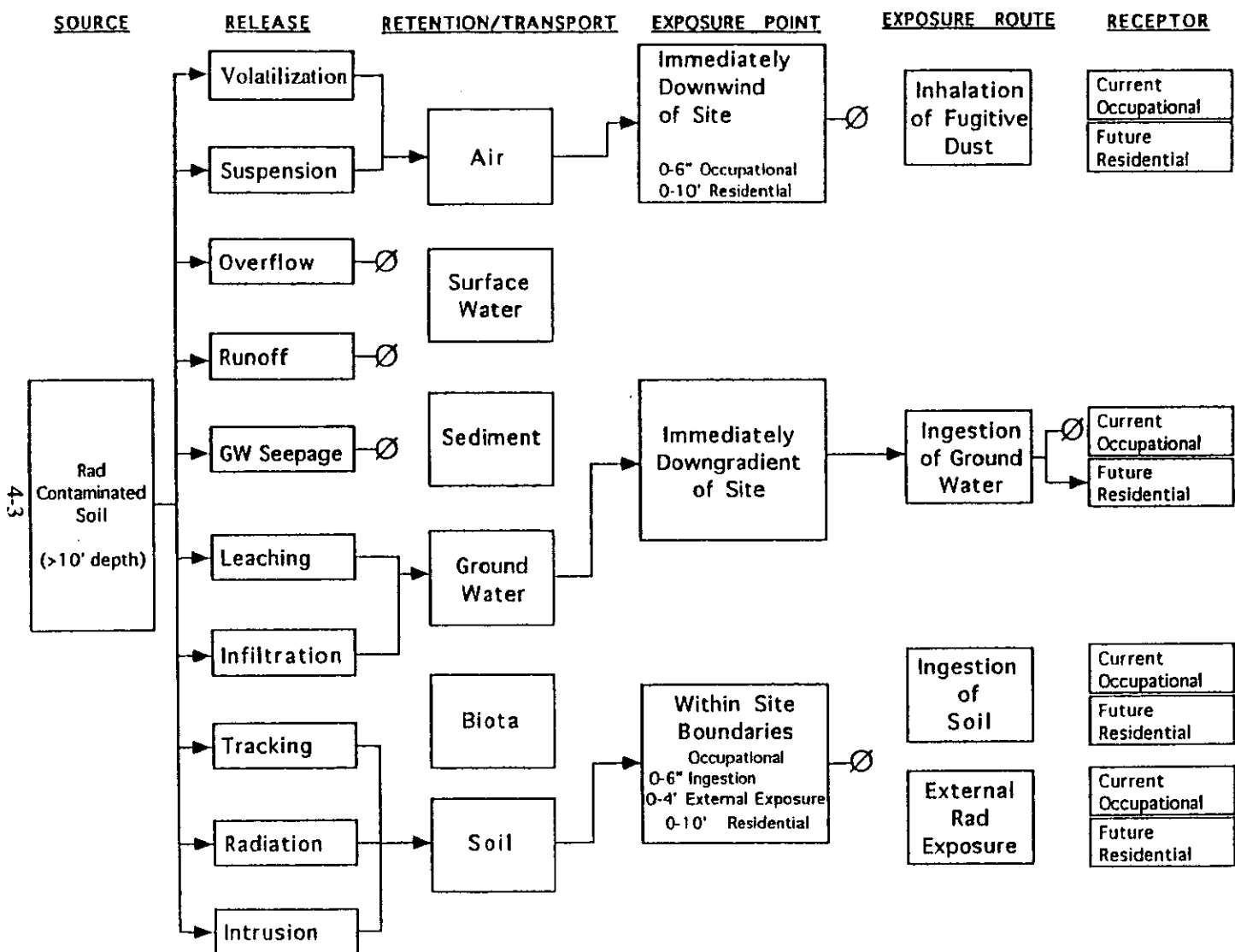


Figure 4-2. Site conceptual model showing potentially complete pathways of OU 2-05 TRA-19 Original Storage Tanks 1 and 4 soil contamination.

4.2 Summary of OU 2-05 Site TRA-19 Risk Assessment

Since no Track 2 sampling was performed for this site, there are no empirical data. However, entries in the HPLs infer that the tanks were intact and had not leaked. Based on this information, risk is judged low and information reliability is judged low, as illustrated in Table 4-1.

Although the RCT who monitored the project indicated that subsurface contamination does exist, this contamination is from warm waste lines in the subsurface, not from tank operations. Remaining contaminated soils are not included in this OU and will be discussed during the WAG 2 comprehensive RI/FS scoping, and will be appropriately addressed at that time.

Table 4-1. Qualitative risk and reliability evaluation table for TRA-19 in OU 2-05.

	QUALITATIVE RISK		
	Low	Medium	High
Highly unreliable	Screening data	TRACK 2	
Medium reliability	No Action Required		
Highly reliable		RI/FS	Interim Action
RELIABILITY	LOW concentration resulting in risk < 10 ⁻⁶	MEDIUM	HIGH concentration resulting in risk > 10 ⁻⁴
	Qualitative risk		

5. TRA-603/605 WARM WASTE SUMP TANK

5.1 OU 2-05 Site TRA-603/605 Track 2 Data Collection

This site was never assigned a specific site code, but consists of potentially contaminated soils associated with the MTR process water line that is now used as a sump tank. The process water lines run from the MTR basement pipe tunnel underneath TRA-603, the MTR reactor building, to process water building TRA-605. Figures 5-1 and 5-2 summarize the information on several engineering drawings (references) to illustrate the system.

The preliminary scoping recommendation was for no further action with the continuing Track 2 investigation consisting of additional data gathering to confirm that the sump tank had never leaked. Even though only part of the process water system is utilized as a sump tank, information regarding the entire process water loop between MTR-603 and MTR-605 was examined.

5.1.1 TRA 603/605 Site Background and History

The TRA-603/605 site consists potentially contaminated soils generated by operation of the portion process water line underneath MTR-603 now in use as a sump tank. This section of this piping consists of about 45 ft of deactivated MTR primary coolant return head (flow was from the reactor to the process water building). The process water loop consists of two parallel lines between MTR-603 and MTR-605. One line originally transferred process water from the reactor to the process water building, and the other returned water to the reactor. The portion of the piping currently in use as a sump tank starts in the pipe tunnel underneath the MTR canal, 28 ft below the TRA-603 basement. The pipe tunnel has a total length of about 125 ft and extends about 45 ft north from the reactor building, with a slope of approximately 20 to 24 degrees towards the surface. From the tunnel, two 30-in. process water lines continue approximately 220 ft to TRA-605. The 220-ft runs are located about 6 ft below the surface and slope slightly downward towards the reactor building. The process water building was decontaminated and decommissioned in 1984 (Browder and Wills, 1985). The two process water lines from the MTR were capped near the process water building at that time. The lines were also capped inside MTR-603 during the modification of the warm waste system.

The normal working capacity of the sump tank is limited to the pipe contained in the tunnel. There is no evidence that the pipes have ever leaked. Personnel associated with TRA indicate that stainless steel lines typically maintain their integrity and have an indefinite life expectancy. The conceptual site model for TRA-603/605 appears in Figure 5-3. All pathways except future residential groundwater ingestion are incomplete. Other pathways were eliminated due to the depth of potential contamination.

5.1.2 TRA 603/605 Summary of Data Quality Objectives for Data Collection

It was determined during the preliminary scoping process that additional data acquisition for this site would be limited to renewed efforts to locate existing historical data. Specifically, more evidence regarding contaminants of concern and the condition of the pipes was needed to support a recommendation for NFA or additional sampling.

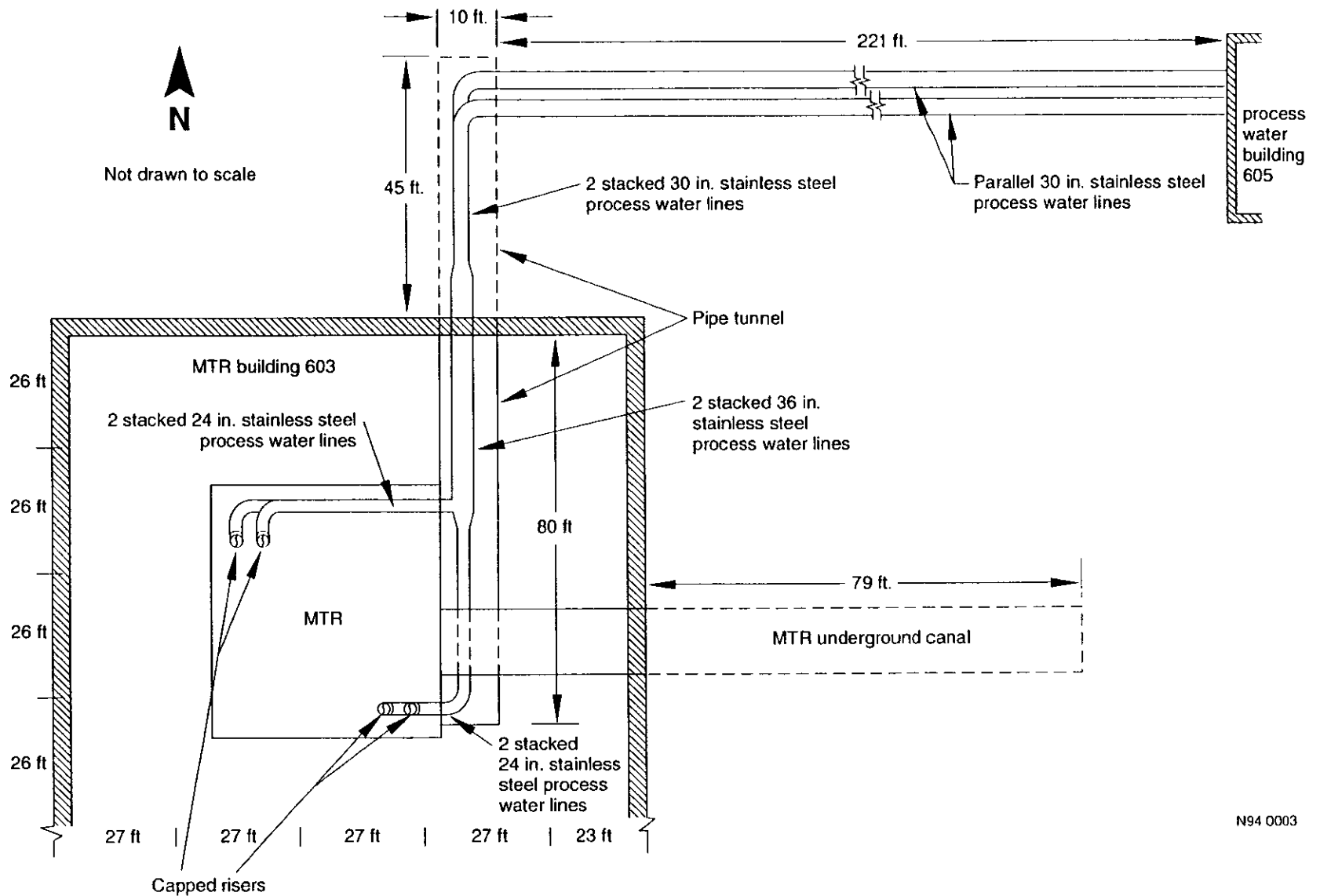


Figure 5-1. Conceptual drawing of the process water loop.

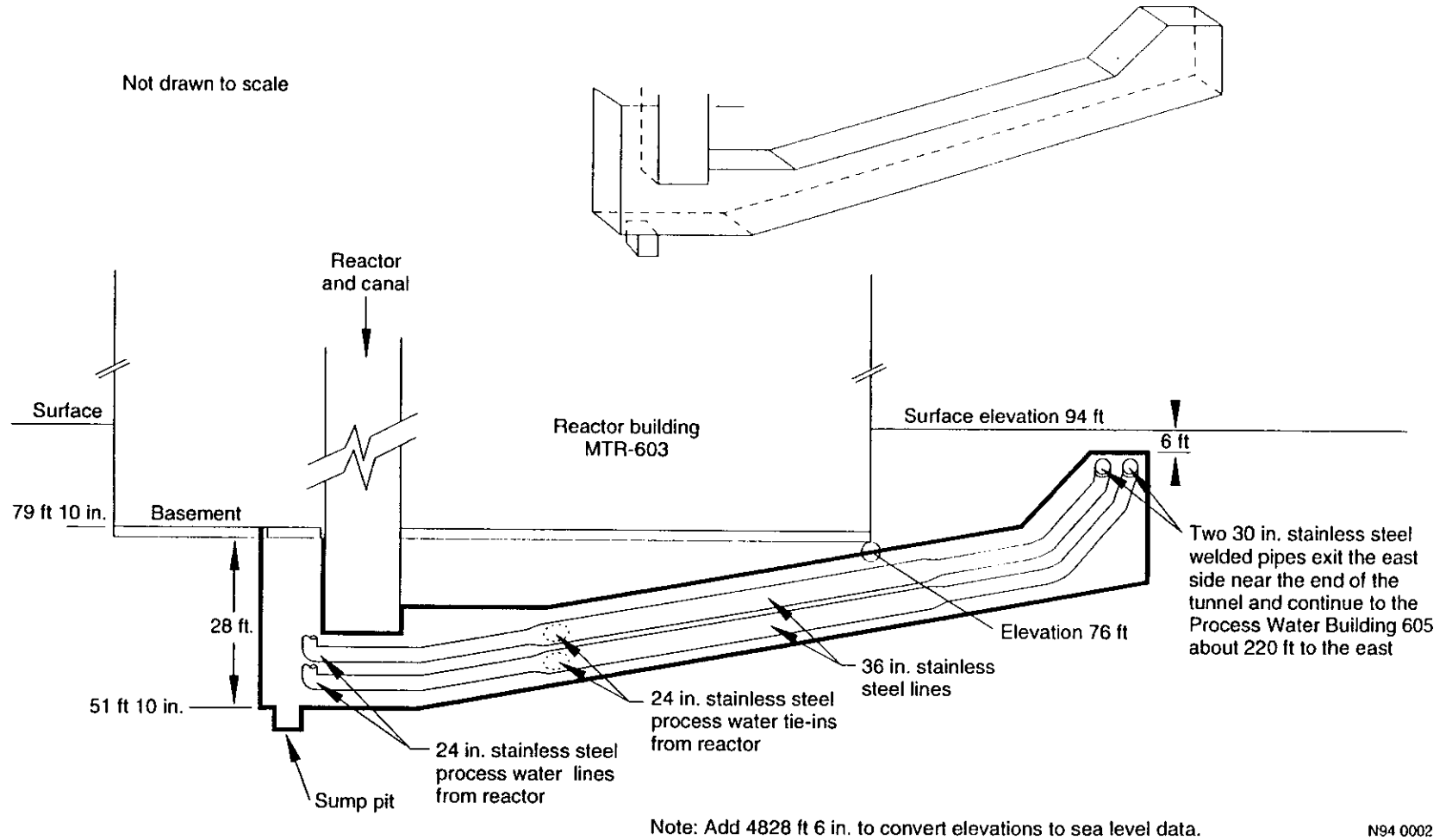


Figure 5-2. Diagram of the process water loop.

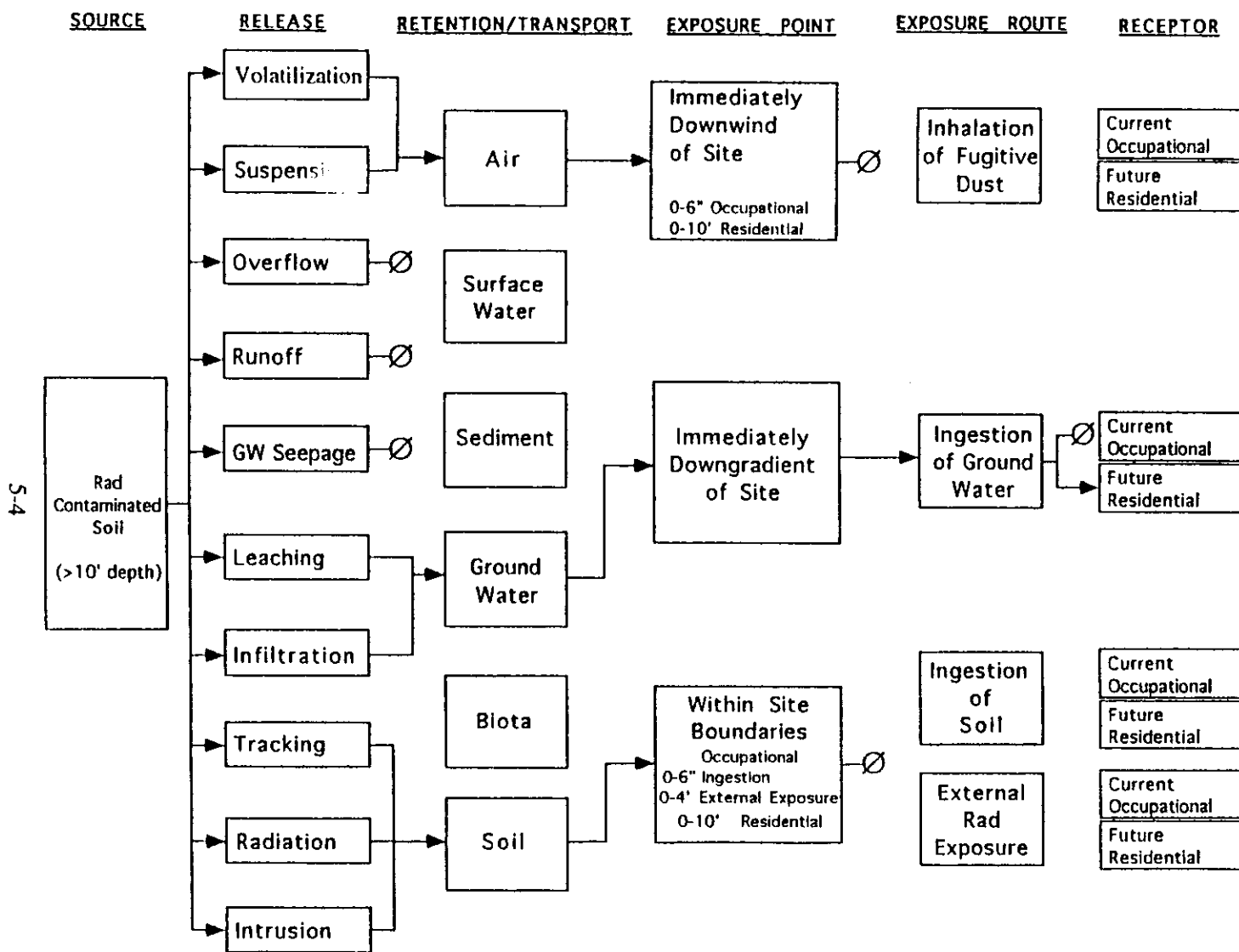


Figure 5-3. Site conceptual model showing potentially complete pathways of OU 2-05 TRA-603/605 Sump Tank soil contamination.

5.1.3 TRA-603/605 Summary of Data Collection

A conceptual drawing of the process water loop is shown in Figure 5-1. Engineering drawings (MTR, 1993a through 1993f) of the two process water lines between the MTR reactor building and the process water building indicate the following:

- Both pipes are 0.25-in.-thick type 347 stainless steel with welded joints
- Underneath the MTR, a total of four 24-in. lines merge into two 36-in. lines. Within the portion of the tunnel that extends beyond the north wall of MTR-603, the diameter of each of the two lines is reduced from 36 in. to 30 in.
- The tunnel extends about 45 ft north from the north side of the reactor building MTR-603
- The distance between the pipe tunnel and the process water building is about 220 ft
- The two 30-in.-diameter stainless steel lines are parallel and are located about 6.5 ft below ground surface
- The pipes slope slightly downward from the process water building to the pipe tunnel, then slope steeply from the end of the tunnel down to the reactor building wall; therefore, any residual effluent in the lines would drain down into the lines contained in the pipe tunnel.

There is no evidence that the subsurface lines have ever leaked. Standard operating procedures included monitoring the process water when the MTR was in operation (AEC, 1953). Any significant loss of primary coolant would have been quickly detected and remedied. It is probable that any leaks involved valves and equipment within the reactor structure or the process water building. Any leaks within the section now in use as a sump tank would have been contained within the concrete pipe tunnel. All of the pipes from the reactor building, through the tunnel, and to the process water building are constructed of 0.25-in. stainless steel with welded seams. Pipelines of such construction typically maintain their integrity. It is worthy of note that any significant leakage from the pipe tunnel into the subsurface at depths greater than 14 ft would not be differentiable from the leakage from the MTR canal. The canal leaked large quantities of water.

An MTR process water sample logbook for May 11, 1964 to December 12, 1965 was located (MTR, 1965). This logbook contains a record of the process water monitoring for beta/gamma and alpha. Samples were collected and activities counted every 4 hours on a daily basis during this period. Appendix D discusses process water concentrations and includes a table of average activities in counts per minute per milliliter, a conversion to estimated picocuries per liter, a table of probable radionuclides and MTR estimated quantities, and supporting discussion. For the period of time examined, the process water averaged 43,720 c/min/mL beta/gamma, equivalent to approximately $3.28\text{E}+7$ pCi/L, and 0.469 c/min/mL alpha, about $1.41\text{E}+3$ pCi/L.

5.1.4 TRA-603/605 Deviations to the SAP

Track 2 sampling was not performed for this site.

5.2 Summary of OU 2-05 Site TRA-603/605 Risk Assessment

Because of the depth and location of TRA-603/605, future residential groundwater ingestion is the only potentially complete pathway for the site. Review of the PSP attached to the SAP and the information discussed in Section 5.1.3 indicates that there was probably no leakage of process water into subsurface soils; therefore, there is no source and risk is rated low. The reliability of the information is judged to be only medium. The medium rating is assigned because of (a) the scarcity of information and (b) the referenced engineering drawings, although revised several times, are not "as built" drawings. As-builts could not be located. Table 5-1 illustrates the information reliability and risk from this site.

Table 5-1. Qualitative risk and reliability evaluation table for TRA-603/605 in OU 2-05.

	QUALITATIVE RISK		
	Low	Medium	High
Highly unreliable	Screening data	TRACK 2	Screening data
Medium reliability	No Action Required		
Highly reliable		RI/FS	Interim Action
RELIABILITY	LOW concentration resulting in risk < 10^{-6}	MEDIUM	HIGH concentration resulting in risk > 10^{-4}
	Qualitative risk		

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Appendix A

TRA-15 Supporting Information

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Appendix A

TRA-15 Supporting Information

A.1 Quality Assurance/Quality Control Results for TRA-15

The draft *Quality Assurance Project Plan for Waste Area Groups 1, 2, 4, 5, 6, and 10* (EG&G Idaho, 1993) was the controlling quality document guiding this investigation. Minimum requirements for precision, accuracy, completeness, representativeness, and comparability are defined in the QAPjP. Known planned deviations from this document are defined in Section 3 of the SAP (Jessmore, 1993). The following summarizes the results of the quality assurance and quality control sampling done during the Track 2 investigation at TRA-15.

A.1.1 TRA-15 Field Precision and Accuracy

Precision measures how much variability there is between data collected under a given set of conditions. In the field, precision is affected by sample collection procedures and the natural heterogeneity in soils. Overall precision (field plus laboratory) can be evaluated by the use of collocated duplicate samples collected in the field. Duplicate samples were collected from each borehole drilled at TRA-15. Duplicates were collected from the 27–31-ft interval in BH #1 and analyzed for radionuclides, CLP metals, and anions. Duplicates were not collected for CLP volatile organic compounds (VOCs) and semivolatile organic compounds (SVOC) due to poor recovery. Duplicates for BH #2 were collected from the 21–25-ft interval, and analyses were performed for analytes. Duplicates for BH #3 were collected from the 17–19-ft interval for all analytes except VOCs and SVOCs, again due to poor recovery. The duplicates for these compounds were collected from the 25–27-ft interval.

The QAPjP requires one duplicate sample per week or 10% of all field samples collected for VOCs, with a minimum of two sets per media sampled be collected. The requirement for non-VOCs is one per week or 10% of all samples collected. For all analyses, with the exception of gamma spectroscopy, this criterion was met or exceeded. For the 26 gamma spectroscopy samples collected, only two sets of duplicates were collected.

The relative percent differences (RPDs) were calculated for all duplicate sample sets with positive hits for an analyte in both samples reported. The results are shown in Table A-1. The RPD for the one gamma result was 58%. For radiochemical analyses, values ranged from 0 to 96%. The range of values for the radionuclides is not unexpected since soil can have different activities of radionuclides in different areas of the same sample due to the presence of particles. The RPDs for metals ranged from 0.31 to 58.31%. The average RPD for all was 22%, and the variance was calculated to be 4%. This measure of precision can be considered low since the EPA has reported that soil sample precision is commonly between 30 and 40% (EPA, 1992).

Accuracy is a measure of how close to the true value a sample result is. In the field, accuracy can be affected by sample preservation and handling, field contamination, and the sample matrix. The first three of these parameters can be qualitatively assessed by evaluating the

Table A-1. OU 2-5 site TRA-15 field duplicates and relative percent differences.

Sample ID	Compound	Bore Hole	Depth (ft)	Concentration	C1-C2	Average	C1-C2 /Avg	Relative Percent Difference
2TB00602AB	ALPHA	3	17-19	26.00	13.00	19.50	0.67	66.67
2TB00601AB	ALPHA	3	17-19	13.00				
2TB04502AB	ALPHA	2	21-25	21.00	8.00	17.00	0.47	47.06
2TB04501AB	ALPHA	2	21-25	13.00				
2TB03204AB	ALPHA	1	27-31	40.00	26.00	27.00	0.96	96.30
2TB03201AB	ALPHA	1	27-31	14.00				
2TB03201AB	AM-241	1	27-31	0.30	0.10	0.25	0.40	40.00
2TB03204AB	AM-241	1	27-31	0.20				
2TB00602AB	BETA	3	17-19	25.00	1.00	24.50	0.04	4.08
2TB00601AB	BETA	3	17-19	24.00				
2TB04502AB	BETA	2	21-25	27.00	2.00	26.00	0.08	7.69
2TB04501AB	BETA	2	21-25	25.00				
2TB03204AB	BETA	1	27-31	6640.00	1860.00	5710.00	0.33	32.57
2TB03201AB	BETA	1	27-31	4780.00				
2TB00602R4	CS-137	3	17-19	0.13	0.06	0.10	0.58	57.69
2TB00601R4	CS-137	3	17-19	0.07				
2TB03201AB	PU-238	1	27-31	0.30	0.10	0.25	0.40	40.00
2TB03204AB	PU-238	1	27-31	0.20				
2TB03204AB	PU-239/240	1	27-31	0.40	0.20	0.30	0.67	66.67
2TB03201AB	PU-239/240	1	27-31	0.20				
2TB03204AB	SR-90	1	27-31	2280.00	60.00	2250.00	0.03	2.67
2TB03201AB	SR-90	1	27-31	2220.00				
2TB00602AB	U-234	3	17-19	1.00	0.10	0.95	0.11	10.53
2TB00601AB	U-234	3	17-19	0.90				
2TB04502AB	U-234	2	21-25	0.80	0.20	0.70	0.29	28.57
2TB04501AB	U-234	2	21-25	0.60				

Table A-1. (continued).

Sample ID	Compound	Bore Hole	Depth (ft)	Concentration	C1 - C2	Average	C1 - C2 / Avg	Relative Percent Difference
2TB03204AB	U-234	1	27-31	1.10	0.00	1.10	0.00	0.00
2TB03201AB	U-234	1	27-31	1.10				
2TB04502AB	U-238	2	21-25	0.80	0.20	0.70	0.29	28.57
2TB04501AB	U-238	2	21-25	0.60				
2TB03204AB	U-238	1	27-31	1.20	0.10	1.15	0.09	8.70
2TB03201AB	U-238	1	27-31	1.10				
2TB04502C1	ARSENIC	2	21-25	2.90	0.40	2.70	0.15	14.81
2TB04501C1	ARSENIC	2	21-25	2.50				
2TB03204C1	ARSENIC	1	27-31	3.40	0.40	3.20	0.13	12.50
2TB03201C1	ARSENIC	1	27-31	3.00				
2TB04501C1	BARIUM	2	21-25	97.50	18.80	88.10	0.21	21.34
2TB04502C1	BARIUM	2	21-25	78.70				
2TB03201C1	BARIUM	1	27-31	130.00	18.00	121.00	0.15	14.88
2TB03204C1	BARIUM	1	27-31	112.00				
2TB04501C1	CALCIUM	2	21-25	9640.00	1880.00	8700.00	0.22	21.61
2TB04502C1	CALCIUM	2	21-25	7760.00				
2TB03201C1	CALCIUM	1	27-31	3260.00	590.00	2965.00	0.20	19.90
2TB03204C1	CALCIUM	1	27-31	2670.00				
2TB04501C1	CHROMIUM	2	21-25	22.10	4.90	19.65	0.25	24.94
2TB04502C1	CHROMIUM	2	21-25	17.20				
2TB03201C1	CHROMIUM	1	27-31	31.00	9.70	26.15	0.37	37.09
2TB03204C1	CHROMIUM	1	27-31	21.30				
2TB04501C1	COBALT	2	21-25	5.70	0.60	5.40	0.11	11.11
2TB04502C1	COBALT	2	21-25	5.10				
2TB03201C1	COBALT	1	27-31	7.60	2.40	6.40	0.38	37.50
2TB03204C1	COBALT	1	27-31	5.20				

Table A-1. (continued).

Sample ID	Compound	Bore Hole	Depth (ft)	Concentration	C1 - C2	Average	C1 - C2 /Avg	Relative Percent Difference
2TB00602C1	COPPER	1	17-19	13.40	0.70	13.05	0.05	5.36
2TB00601C1	COPPER	1	17-19	12.70				
2TB04501C1	COPPER	2	21-25	14.30	1.50	13.55	0.11	11.07
2TB04502C1	COPPER	2	21-25	12.80				
2TB03204C1	COPPER	1	27-31	14.60	1.80	13.70	0.13	13.14
2TB03201C1	COPPER	1	27-31	12.80				
2TB00601AN	FLUORIDE	1	17-19	1.97	0.16	1.89	0.08	8.47
2TB00602AN	FLUORIDE	1	17-19	1.81				
2TB04501AN	FLUORIDE	2	21-25	0.92	0.10	0.87	0.11	11.49
2TB04502AN	FLUORIDE	2	21-25	0.82				
2TB03204AN	FLUORIDE	1	27-31	1.49	0.23	1.38	0.17	16.73
2TB03201AN	FLUORIDE	1	27-31	1.26				
2TB00602C1	IRON	1	17-19	9450.00	1520.00	8690.00	0.17	17.49
2TB00601C1	IRON	1	17-19	7930.00				
2TB04501C1	IRON	2	21-25	12700.00	3110.00	11145.00	0.28	27.90
2TB04502C1	IRON	2	21-25	9590.00				
2TB03201C1	IRON	1	27-31	14000.00	4350.00	11825.00	0.37	36.79
2TB03204C1	IRON	1	27-31	9650.00				
2TB00601C1	LEAD	1	17-19	9.50	2.20	8.40	0.26	26.19
2TB00602C1	LEAD	1	17-19	7.30				
2TB04501C1	LEAD	2	21-25	10.60	3.60	8.80	0.41	40.91
2TB04502C1	LEAD	2	21-25	7.00				
2TB03204C1	LEAD	1	27-31	5.60	0.70	5.25	0.13	13.33
2TB03201C1	LEAD	1	27-31	4.90				

Table A-1. (continued).

Sample ID	Compound	Bore Hole	Depth (ft)	Concentration	C1 - C2	Average	C1 - C2 / Avg	Relative Percent Difference
2TB04501 C1	MAGNESIUM	2	21 - 25	4690.00	560.00	4410.00	0.13	12.70
2TB04502 C1	MAGNESIUM	2	21 - 25	4130.00				
2TB03201 C1	MAGNESIUM	1	27 - 31	4530.00	1260.00	3900.00	0.32	32.31
2TB03204 C1	MAGNESIUM	1	27 - 31	3270.00				
2TB04502 C1	NICKEL	2	21 - 25	15.20				
2TB03201 C1	NICKEL	1	27 - 31	22.00	2.40	20.80	0.12	11.54
2TB03204 C1	NICKEL	1	27 - 31	19.60				
2TB00601 AN	ORTHOPHOSPHATE	1	17 - 19	0.62	0.06	0.59	0.10	10.17
2TB00602 AN	ORTHOPHOSPHATE	1	17 - 19	0.56				
2TB04502 AN	ORTHOPHOSPHATE	2	21 - 25	0.21	0.06	0.18	0.33	33.33
2TB04501 AN	ORTHOPHOSPHATE	2	21 - 25	0.15				
2TB03201 AN	ORTHOPHOSPHATE	1	27 - 31	0.68	0.07	0.65	0.11	10.85
2TB03204 AN	ORTHOPHOSPHATE	1	27 - 31	0.61				
2TB04501 C1	POTASSIUM	2	21 - 25	1010.00	274.00	873.00	0.31	31.39
2TB04502 C1	POTASSIUM	2	21 - 25	736.00				
2TB03201 C1	POTASSIUM	1	27 - 31	1140.00	237.00	1021.50	0.23	23.20
2TB03204 C1	POTASSIUM	1	27 - 31	903.00				
2TB03201 C1	SODIUM	1	27 - 31	130.00	10.00	125.00	0.08	8.00
2TB03204 C1	SODIUM	1	27 - 31	120.00				
2TB00601 AN	SULFATE	1	17 - 19	15.20	3.90	13.25	0.29	29.43
2TB00602 AN	SULFATE	1	17 - 19	11.30				
2TB03201 AN	SULFATE	1	27 - 31	20.40	2.00	19.40	0.10	10.31
2TB03204 AN	SULFATE	1	27 - 31	18.40				
2TB00601 C1	VANADIUM	1	17 - 19	23.70	10.70	18.35	0.58	58.31
2TB00602 C1	VANADIUM	1	17 - 19	13.00				

Table A-1. (continued).

Sample ID	Compound	Bore Hole	Depth (ft)	Concentration	C1 - C2	Average	C1 - C2 / Avg	Relative Percent Difference
2TB04502C1	VANADIUM	2	21 - 25	32.50				
2TB03201C1	VANADIUM	1	27 - 31	29.00	2.60	27.70	0.09	9.39
2TB03204C1	VANADIUM	1	27 - 31	26.40				
2TB04501C1	ZINC	2	21 - 25	49.20	7.00	45.70	0.15	15.32
2TB04502C1	ZINC	2	21 - 25	42.20				
2TB03201C1	ZINC	1	27 - 31	51.60	10.50	46.35	0.23	22.65
2TB03204C1	ZINC	1	27 - 31	41.10				
2TB04502AN	CHLORIDE	2	21 - 25	2.82	0.63	2.51	0.25	25.15
2TB04501AN	CHLORIDE	2	21 - 25	2.19				
2TB03201AN	CHLORIDE	1	27 - 31	2.00	0.02	1.99	0.01	1.01
2TB03204AN	CHLORIDE	1	27 - 31	1.98				

* Concentrations are in units of mg/kg for metals and anions and pCi/g for radionuclides.

Average RPD	0.21	
	1.97	Sum (RPD - Average RPD) ²
	0.04	Sum (RPD - Average RPD) ²
Variance	3.51	N-1 (74) N-1 (56)

results of field, equipment, and trip blanks. During the sampling at TRA-15, three sets of field blanks were collected, one from each borehole (2TB04201, 2TB02601, and 2TB01501 for BHs #1, #2, and #3, respectively). Trip blanks were included in the coolers of VOC samples shipped to the laboratory (2TB04001 and 2TB04102). Only one rinsate (equipment) blank was collected during the investigation. This sample, 2TB03801, was collected before drilling began on BH #1. All blanks (except trip blanks) were analyzed for all the analytes of interest in the investigation.

In the field blank for BH #2, chloromethane, acetone, and one tentatively identified compound (TIC) were detected in the sample analyzed for VOCs, resulting in some "U" flags in the data set. Bis(2-ethylhexyl)phthalate was detected in all three field blanks, as well as the rinsate sample for BH #1. This resulted in sample 2TB03202 being flagged "U" for the compound.

Metals detected in the field blank for BH #2 include lead, calcium, and zinc. In the rinsate blank, aluminum, barium, calcium, iron, lead, magnesium, manganese, sodium, and zinc were detected. The only action taken as a result was the "U" flagging of sodium in seven samples.

Some of the elements detected in the field and equipment blank are ones normally present in high concentrations in soils (e.g. aluminum, calcium, and magnesium). In addition, none of these metals are contaminants of concern for the site. The blank contamination does indicate that the equipment used in BH #1 may not have been completely decontaminated prior to use, potentially affecting the accuracy of the sampling results for BH #1. Similarly, the detection of organic compounds and metals in the field blanks indicates the potential for contamination in the field although the contaminants are at very low concentrations. In trip blank 2TB04102, acetone and methylene chloride were detected, resulting in the flagging of 10 samples from BH #3 with a "U" for acetone. The contamination in the field QA/QC samples may also be a result of contamination in the laboratory. For example, the results for bis(2-ethylhexyl)phthalate and manganese in the blanks are themselves qualified with "U" flags due to laboratory contamination.

Because only one rinsate blank was collected during the investigation, it is impossible to verify that cross-contamination did not occur between boreholes. Any cross contamination that may have occurred is not expected to change the results of the risk assessment performed for the site. All contaminants of concern with the exception of arsenic were eliminated during screening (see Section 2.2 for a discussion of the risk assessment). Arsenic was not detected in the rinsate blank for BH #1. Additionally, the elevated concentrations of contaminants in the 21-27-ft interval of BH #1 over all other intervals sampled indicate that the area of contamination from the tank leakage was a result of the french drain, and that it did not extend to the west or south as far as the other two boreholes.

A.1.2 TRA-15 Laboratory Precision and Accuracy

Laboratory precision is measured in the same manner as field precision using laboratory duplicates, matrix spike (MS), and matrix spike duplicates (MSD). The number of laboratory duplicates and MS/MSD samples are specified in the EPA Contract Laboratory Program Statement of Work or in EG&G Idaho Sample Management Office (SMO) standard operating procedures. The QAPjP requires that laboratory precision be within limits and goals established

by the EPA and the SMO. The results reported by the laboratory are assessed against these criteria during data validation, and the results are documented in the data validation reports.

For BHs #1 and #2, duplicates were taken from sample 2TB03001 for metals and anions analyses, from samples 2TB02702 and 2TB04502 for alpha analyses, and from samples 2TB02702, 2TB03001, and 2TB01601 for gamma analysis. MS/MSDs were prepared from samples 2TB03303. The RPD results of all laboratory duplicate and MS/MSD analyses were within the required limits with the following exceptions:

- The RPD for orthophosphate was 60.2% (limit 35%) in sample delivery group (SDG) 2TB02601AN
- The MS/MSD RPD for chlorobenzene was 14% (limit, 13%) in SDG 2TB02801CV
- The duplicate sample RPD for calcium and chromium were 145% and 39%, respectively, in SDG 2TB01601C1.

For BH #3, duplicates for metals and anions analyses were taken from sample 2TB00701, from samples 2TB00501 and 2TB00801 for gamma analyses, and from samples 2TB00901 and 2TB00101 for alpha analyses. The MS/MSD was prepared from sample 2TB00701. The RPD results of all laboratory duplicates and MS/MSD analyses were within the required limits with the following exceptions:

- The MS/MSD RPD for toluene was 20% (13% acceptable)
- For 3 of 11 analytes in the MS/MSD for SDG 2TB00201OS, the RPDs were outside acceptable limits; however, no action was required as a result.

Laboratory analytical accuracy is evaluated through the use of laboratory control samples (LCS) and matrix spikes (MS). For VOCs, the trip and field blanks can also be used to evaluate laboratory accuracy. The results of field and trip blank analyses are reported in the discussion of field accuracy. All LCS and MS results were reported to be within limits defined by the EPA and SMO with the following exceptions:

- An out-of-control value for chloride and matrix interference effects for orthophosphate were reported for SDG 2TB00101AN (BH #3)
- Antimony, manganese, and selenium had MS results outside of the limits in SDG 2TB01601C1, resulting in "UJ" and "J" flags for some samples (BHs #1 and #2)
- Antimony, lead, manganese, and selenium MS recoveries were outside of limits in SDG 2TB00101C1 (BH #3), resulting in the rejection of lead data for 12 samples and some "UJ" and "J" for other data.

Based on the review of the validated data reports, the overall laboratory precision and accuracy goals for this project have been met, since the required laboratory QA/QC analyses and calculations were performed with few results reported outside the defined limits.

A.1.3 TRA-15 Completeness

Completeness measures the quantity of useable data that have been collected during an investigation. The QAPjP requires that a completeness goal of 90% and 100% be achieved for noncritical and critical samples, respectively. Actual completeness for noncritical samples was 103%, therefore exceeding the criteria. Completeness for critical samples was 89%, falling far below the 100% criteria.

A.1.3.1 TRA-15 Noncritical Sample Completeness. Completeness for the TRA-15 sampling was evaluated according to Section 8.3 of the QAPjP. The total number of samples planned in the SAP were not used in the evaluation since the depth of the alluvium-basalt interface was unknown and the SAP included sampling to a depth of 51 ft below land surface. Rather, the planned number of samples was counted through the last planned interval actually encountered before the alluvium-basalt interface was reached during sampling. For example, in BH #1, the interface was encountered at 35 ft 10 in., so the last planned interval used in the completeness calculation was the 33–35-ft interval. The results are given in Table A-2 for noncritical samples. Completeness by borehole is 118% for BH #1, 100% for BH #2, and 98% for BH #3. Overall completeness for noncritical samples is 103%.

For BH #1, the alpha/beta sample from interval of 33–35 ft was broken; however, an extra alpha/beta sample was collected from the cuttings in the 15–17-ft interval. No anion sample was collected from the 13–17-ft interval. For VOC analyses, no sample was collected from the 17–19-ft interval; however, extra samples were collected from the 27–29-ft and 31–33-ft intervals. For SVOC analyses, no sample was collected from the 13–17-ft interval, but extra samples were collected from the 27–29-ft and 31–33-ft intervals, where contamination was detected in the field. A more complete discussion of deviations in the field (due primarily to poor recovery) can be found in Section 2.1.4 and Appendix A. Although not as important, the noncritical completeness for BH #1 was also reduced by the rejection of 19 (out of 973) data points from the laboratory by the data validators. Rejected data are those not included in the risk assessment because of "R" flags. For BH #1, most of these, 13 data points, were for SVOCs rejected due to poor surrogate recoveries. Five VOC data points for 2-butanone were "R" flagged due to low relative response factors (RRFs) during initial calibration. The last data point rejected was the strontium-90 analysis for sample 2TB02702AB due to an out-of-control analytical yield.

For BH #2 and #2a, no samples for alpha/beta, metals, or anion analyses were collected from the 17–19-ft interval. Additional samples for these analyses, as well as gamma analysis, were collected from the 27–29-ft interval. Samples for VOC and SVOC analyses were not collected from the 17–19-ft, 25–27-ft, or 37–37-ft intervals. Samples for these analyses were instead collected from the 21–23-ft, 23–25-ft, and 27–29-ft intervals. Six data points for 2-butanone from BH #2 and #2a were rejected during data validation due to low RRFs during initial calibration.

For BH #3, most samples were collected as planned, except no samples for metals, anions, or VOC analyses were collected from the 9–11-ft interval due to poor recovery. Two extra samples were collected from the surface for metal and anion analyses, and an additional VOC sample was taken from the 21–23-ft interval. Twenty-five data points were flagged by data validators. These include eight data points each for methylene chloride and 2-butanone that were rejected due to low RRFs during initial calibration and nine data points for lead that were rejected due to poor matrix spike recovery.

Table A-2. TRA-15 completeness results for noncritical samples.

Planned number of samples by analyses	Borehole			Total
	1	2	3	
Alpha	4	7	10	21
Anions	4	7	9	19
Metals	4	7	9	19
Volatiles	4	6	8	18
Semivolatiles	4	6	8	18
Gamma	4	7	10	21
Total	24	40	54	118

Actual number of samples by analysis	Borehole			Total
	1	2	3	
Alpha	4	7	10	21
Anions	3	7	9	19
Metals	5	7	9	21
Volatiles	4	6	8	18
Semivolatiles	4	6	8	18
Gamma	5	8	10	23
Total	25	41	54	130

Planned number of data points	612	973	1303	2888
Actual number of data points	723	975	1278	2976
Percent completeness	118	100	98	103

A.1.3.2 TRA-15 Critical Sample Completeness. The samples collected from the 21–23-ft, 23–25-ft and 25–27-ft intervals were designated as critical samples in the SAP for all analytes of interest. The SAP also required the collection of sample material for matrix spike and matrix spike duplicates from the 23–25-ft interval; however, these are not considered critical. The number of analytes of interest for the samples collected, by analysis type, are nine alpha, 24 metals, 15 gamma, seven anions, 34 VOCs, and 64 SVOCs. This yields 318 data points actually collected, 358 planned, and a completeness of 89%. The completeness was affected by poor recovery; from the 21–23-ft interval, samples were not collected for anion analyses. All samples for analysis of all analytes of interest were collected from the 23–25-ft and 25–27-ft intervals. An additional sample for VOC analyses was collected from the 21–23-ft interval. Sixty-four SVOC data points, all nondetects for sample ID 2TB0310105 were rejected by the data validators because surrogate recovery was less than 10%. For all three VOC samples from the critical intervals, the 2-butanone data, also nondetects, were rejected due to a low initial RRF.

Not meeting the completeness goal for critical samples is not considered to affect the quality of the data collected. The sample intervals were deemed critical to ensure that contamination from the french drain would be detected if present, even though the exact depth the

contamination would be present at was unknown. These objectives were met since contamination, although present in the critical intervals, was also present in deeper intervals sampled. Additionally, all of the anions detected during sampling were eliminated from the risk assessment during screening, so the lack of anion data and the rejected VOC and SVOC data are not expected to change the results of the risk assessment.

A.1.4 TRA-15 Representativeness

Representativeness is a qualitative parameter that expresses the degree to which sample data accurately and precisely represent a characteristic of interest being measured. This parameter is best evaluated by comparing the number of samples collected with the number necessary to be representative and confirming that the sample locations were properly selected. The characteristic of interest for TRA-15 was the presence or absence of contamination in the subsurface near the tank vault. The locations of the boreholes drilled were located as planned in the SAP and intended to be biased toward detecting contamination if present. That the locations were properly selected is confirmed by the detection of contamination as predicted by historical information concerning the site. As discussed in the completeness section (Section A.1.3), the number of samples collected was adequate to characterize the boreholes as planned. The sampling locations (intervals sampled), while slightly different than those originally planned (see Section 2.1.4 for a discussion on deviations from the SAP), are not believed to have affected the representativeness of the data.

A.1.5 TRA-15 Comparability

Comparability is a qualitative measure of how equivalent data sets used in the risk assessment are. The QAPjP requires that standard field and analytical methods and/or written procedures will be used to ensure that data comparability is achieved. For the TRA-15 investigation, all sampling was performed within a 3-week period, using the same SAP and approved procedures as well as the same personnel and analytical laboratories for the analysis of the samples. These factors ensured that the comparability objectives of the QAPjP were met in the investigation.

A.1.6 TRA-15 Other QA/QC

Because of the nature of the analyses performed for the anions, all of the anion data not rejected and used in the risk assessment are considered analytical level III as outlined in EPA guidance (EPA, 1987). This does not affect the results of the Track 2 investigation since all anions were eliminated as contaminants of concern during the risk assessment screening. Concerns were raised by the IDHW^a on the quality of the work performed by the chemical laboratory due to what appears to be an excessive number of "J" flags on the data assigned by the data validators. In response to this concern, the data and the need for corrective actions involving the laboratory were reviewed. The results of this review indicate that most of the flags resulted from data validation criteria, and are not a consequence of inadequate laboratory performance.

a. Letter from Daryl Koch, Idaho Department of Health and Welfare, to Nolan Jensen, U.S. Department of Energy, Subject: "IDHW-DEQ Review and Comment on Analytical Data Package for Track 2 Sampling at TRA-15 in Operable Unit 2-05," October 15, 1993.

A.1.7 References

EG&G Idaho, 1993, *Quality Assurance Project Plan for Waste Area Groups 1, 2, 4, 5, 6, and 10*, EGG-WM-10076, January.

EPA, 1992, *Guidance for Data Useability in Risk Assessment (Part A) Final*, 9285.7-09A, April.

EPA, 1987, *Data Quality Objectives for Remedial Response Activities: Development Process*, EPA/540/G-87/003, March.

Jessmore, J. J., 1993, *Track 2 Sampling and Analysis Plan for the Characterization of Waste Area Group 2, Operable Units 2-05 and 2-07*, EGG-ER-10652, Rev. 1, May.

A.2 Deviations to TRA-15 Data

Tables A-3, A-4, and A-5 compare the planned data to the data from actual sampling performed at TRA-15. Most deviations were generated by the lack of sufficient sample material from the split spoon. A summary discussion of these deviations is given in Section 2.1.4.

The SAP table that appears in the SAP (Jessmore, 1993) was revised subsequent to publication of the SAP. The revised table appears in Section 2, Table 2-4. Deviations discussed in Section 2 and detailed in Tables A-3, A-4, and A-5 are in comparison to the revised Table 2-4.

Table A-3. TRA-15 borehole 1 samples (comparison of samples planned and recorded on revised SAP table of 5/25/93 to actual samples collected).

Planned samples			Actual samples			Comments
Sample ID #	Interval (ft)	Analysis	Sample ID #	Interval (ft)	Analysis	
2TB027	13-17	α/β , γ , metals, anions, VOC, SVOC	2TB02701	13-15	α/β , γ , metals	No recovery in split spoon samples were collected from drill cuttings and may not be representative of the interval sampled.
			2TB02702	15-17	α/β , γ , metals, VOC	
2TB028	17-19	α/β , γ , metals, anions, VOC, SVOC	2TB02801	19-21	α/β , γ , metals, anions, SVOC	17-19 ft interval skipped due to poor recovery in previous interval. All samples except VOC collected in new interval.
2TB029	21-23	α/β , γ , metals, anions	2TB02801	21-23	VOC	Sample for VOC analysis mistakenly collected from 21-23 interval instead of 19-21. Inadequate recovery to collect for anions.
			2TB02901	21-23	α , γ , metals	
2TB030	23-25	α/β , γ , metals, anions, VOC, SVOC	2TB03001	23-35	α/β , γ , metals, anions, VOC, SVOC	Collected as planned. 1300 cpm > bkg of 250 cpm β/γ detected at 24' 10".
2TB031	25-27	α/β , γ , metals, anions, VOC, SVOC	2TB03101	25-27	α/β , γ , metals, anions, VOC, SVOC	Collected as planned. 1800-5750 cpm > bkg of 250 β/γ detected.
2TB032	29-31	α/β , γ , metals, anions, VOC, SVOC	2TB03201	27-31	α/β , γ , metals, anions	Interval was increased to 4' to collect duplicate samples (inadequate recovery in 13-17' interval to collect planned duplicates). VOC and SVOC collected from 27-29' and 29-31' prior to compositing split spoons. 10,000 cpm > bkg of 250 cpm detected in 29-31' interval.
			2TB03202	27-29	VOC, SVOC	
			2TB03203	29-31	Metals, anions, VOC, SVOC	
2TB033	33-35	α/β , γ , metals, anions, VOC, SVOC	2TB03301	31-35	γ , metals, anions	Interval was increased to 4' to collect MS/MSD samples (inadequate recovery to collect from 21-23' interval as planned). VOC & SVOC collected from 31-33' and 33-35' intervals before compositing intervals to better define contamination detected in the field. 200 cpm > bkg of 250 cpm β/γ in 31-33' interval. α/β sample from 31-35' interval broken during preparation, no radiation was detected on broken sample.
			2TB03302	31-33	VOC, SVOC	
			2TB03303	33-35	VOC, SVOC	
2TB034 2TB035 2TB036 2TB037						Basalt encountered at 37' 1". Remaining planned samples for BH 1 were not collected.

Table A-4. TRA-15 boreholes 2 and 2A samples (comparison of samples planned and recorded on revised SAP table of 5/25/93 to actual samples collected).

Planned samples			Actual samples			Comments
Sample ID #	Interval (ft)	Analysis	Sample ID #	Interval (ft)	Analysis	
2TB016	13-17	α/β , γ , metals, anions, VOC, SVOC	2TB01601	13-15	α/β , γ , metals, VOC, SVOC	Inadequate recovery from 15-17' interval to composite for duplicates. All planned samples collected from 13-15'. No recovery in split spoon except anion (not enough material recovered).
2TB017	17-19	α/β , γ , metals, anions, VOC, SVOC	2TB01701	17-19	γ	Inadequate recovery to collect sample, so only γ collected.
An impassable obstruction at a depth of 20' was encountered in BH 2. The drill rig was moved and a new borehole, designated BH 2A, was drilled. The following samples were obtained from BH 2A. A new sample number series, not planned in the SAP, was assigned for this borehole. Sampling was initiated in BH 2A at the 21-23' interval.						
2TB018	21-23	α/β , γ , metals, anions	2TB04501	21-25	α/β , γ , metals, anions	Interval was increased to 4' to collect duplicates. VOC & SVOC were collected from each 2' interval prior to compositing the split spoons.
			2TB04501	21-23	VOC, SVOC	
			2TB04502	23-25	VOC, SVOC	
2TB019	25-27	α/β , γ , metals, anions, VOC, SVOC	2TB05001	25-27	α/β , anions	Inadequate recovery to collect VOC & SVOC samples from 25-27'. Different sample IDs for same interval a result of a labeling error. VOC & SVOC collected from 27-29', as were α/β , γ , metals, & anions since sample material was available in the split spoon.
			2TB04601	25-27	γ , metals	
			2TB05001	27-29	γ , metals	
			2TB04601	27-29	α/β , anions, VOC, SVOC	
2TB020	29-31	α/β , γ , metals, anions, VOC, SVOC	2TB04801	31-33	α/β , γ , metals, anions, VOC, SVOC	Split spoon was advanced to 31-33' interval since 27-29' interval was sampled.
2TB021	33-35	α/β , γ , metals, anions, VOC, SVOC	2TB04901	35-37	α/β , γ , metals, anions, VOC, SVOC	Split spoon was advanced to 35-37' interval since 31-33' interval was sampled.
2TB022	37-39	α/β , γ , metals, anions, VOC, SVOC	2TB05101	37-38	α , γ , metals	Last interval sampled before encountering basalt at 38' 4.5". Recovery was adequate for 3 samples only.
2TB023 2TB024 2TB025						Basalt encountered at 38' 4.5". Remaining planned samples for BH 2 were not collected from BH 2A.

Table A-5. TRA-15 borehole 3 samples (comparison of samples planned and recorded on revised SAP table of 5/25/93 to actual samples collected).

Planned samples			Actual samples			Comments
Sample ID #	Interval (ft)	Analysis	Sample ID #	Interval (ft)	Analysis	
2TB001	0-6"	α/β , γ	2TB01001	0-6"	α/β , γ , metals, anions	Additional samples for metals & anions collected by mistake and labeled with an incorrect sample ID.
2TB002	1-5	α/β , γ , metals, anions, VOC, SVOC	2TB00201	1-3	α/β , γ , metals, anions, VOC, SVOC	Interval was 2' instead of 4', duplicates were not collected.
2TB003	5-7	α/β , γ , metals, anions, VOC SVOC	2TB00301	5-7	α/β , γ , metals, anions, VOC, SVOC	Interval sampled as planned.
2TB004	9-11	α/β , γ , metals, anions, VOC, SVOC	2TB00401	9-11	α/β , anions	Collected only two samples because of inadequate recovery.
2TB005	13-15	α/β , γ , metals, anions, VOC, SVOC	2TB00501	13-15	α/β , γ , metals, anions, VOC, SVOC	Interval sampled as planned.
2TB006	17-19	α/β , γ , metals, anions, VOC, SVOC	2TB00601	17-19	α/β , γ , metals, anions, VOC, SVOC	Interval sampled as planned. In addition, duplicates for all analyses except VOC & SVOC collected.
2TB007	21-23	α/β , γ , metals, anions	2TB00701	21-23	α , γ , metals, anions, VOC, SVOC	Interval sampled as planned with addition of collection for VOC and SVOC.
2TB008	25-27	α/β , γ , metals, anions, VOC, SVOC	2TB00801	25-27	α/β , γ , metals, anions, VOC, SVOC	Interval sampled as planned. In addition, duplicates for VOC & SVOC were collected.
2TB009	29-31	α/β , γ , metals, anions, VOC, SVOC	2TB00901	29-31	α/β , γ , metals, anions, VOC, SVOC	Samples collected as planned.
2TB010	33-35	α/β , γ , metals, anions, VOC, SVOC	2TB00101	33-35	α/β , γ , metals, anions, VOC, SVOC	Samples collected as planned. Different sample number is a result of the labeling error for the 0-6" interval.
2TB011 2TB012 2TB013 2TB014						Basalt encountered at 35' 10". Remaining planned samples for BH 3 were not collected.

A.3 ERIS Data Tables for TRA-15

The following tables contain the validated data resulting from Track 2 sampling at TRA-15.

Sample No.	Analysis	I C Compound	Concentration	Rad		Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
				Uncert.	Units							
2TB02702CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TR02702CV	VOAS - CLP	Acetone	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Chloroform	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Chloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02801C1	INORG	Aluminum	5190		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Arsenic	5.7		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Barium	108		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Beryllium	1.2		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Bromide	5.47		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Cadmium	1.3		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Calcium	127000		MG/KG	*J	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Chloride	2.6		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Chromium	12.5		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Cobalt	4.9		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Copper	10.2		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Fluoride	2.04		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Iron	9400		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Lead	12.2		MG/KG	S	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Magnesium	4290		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Manganese	195		MG/KG	NJ	P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Mercury	.05		MG/KG	U	CV	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Nickel	14.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Nitrate/Nitrite as N	1.64		MG/KG			SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Nitrite	.22		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Orthophosphate(as P)	.11		MG/KG	UJ		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Potassium	965		MG/KG	B	A	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Selenium	.22		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Silver	.44		MG/KG	U	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Sodium	118		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AN	INORG	Sulfate	14.8		MG/KG			SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Thallium	.22		MG/KG	U	F	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Vanadium	23.4		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801C1	INORG	Zinc	49.1		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	ALPHA	20	5.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	BETA	26	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB02801R4	RAD	GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	Sr-90	1.3	.30	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	U-234	1.1	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02801AB	RAD	U-238	1	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4,5-Trichlorophenol	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4-Dinitrophenol	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Nitroaniline	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	3-Nitroaniline	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Nitroaniline	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	4-Nitrophenol	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad		Q	Flags	Matrix	Type	Location	Depth Range(ft)	Sample Date
					Uncert.	Units							
2TB028010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		Pentachlorophenol	910		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TR028010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	160		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	480		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	420		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	170		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	230		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP Y		UNKNOWN	13000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TR028010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB028010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	19-21	01-JUN-93
2TB02901C1	INORG		Aluminum	6070		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Arsenic	3.9		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Barium	122		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Cadmium	1.1		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Calcium	20900		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Chromium	17.3		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Cobalt	5.3		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Copper	12.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Iron	10100		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Lead	5.5		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Magnesium	3070		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Manganese	263		MG/KG	NJ	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Mercury	.05		MG/KG	U	CV	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Nickel	19.3		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Potassium	1170		MG/KG		A	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Selenium	.21		MG/KG	NWUJ	F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Silver	.43		MG/KG	U	F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Sodium	136		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Thallium	.21		MG/KG	U	F	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Vanadium	28.8		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901C1	INORG		Zinc	47.7		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		ALPHA	8	3.60	pCi/g			MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		Am-241	.1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		BETA	22	2.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901R4	RAD		GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		Sr-90	.3	.20	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		U-234	1	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02901AB	RAD		U-238	.9	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TR02801CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB02801CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Acetone	18		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Carbon Tetrachloride	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Chloroform	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Chloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB02801CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	21-23	01-JUN-93
2TB03001C1	INORG	Aluminum	6080		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Arsenic	4		MG/KG	S	F	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Barium	115		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Bromide	5.34		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Calcium	2620		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Chloride	2.41		MG/KG			SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Chromium	21		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Cobalt	6.5		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Copper	14.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Fluoride	1.13		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Iron	11800		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Lead	7.7		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Magnesium	3670		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Manganese	243		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Mercury	.05		MG/KG	U	CV	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Nickel	17.9		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Nitrate/Nitrite as N	1.46		MG/KG			SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Nitrite	.21		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Orthophosphate(as P)	.67		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Potassium	1040		MG/KG	B	A	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Selenium	.21		MG/KG	U	NUJ	F	SOIL	UST SITE	23-25	01-JUN-93
2TB03001C1	INORG	Silver	.43		MG/KG	U		F	SOIL	UST SITE	23-25	01-JUN-93
2TB03001C1	INORG	Sodium	163		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AN	INORG	Sulfate	8.92		MG/KG			SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Thallium	.21		MG/KG	U		F	SOIL	UST SITE	23-25	01-JUN-93
2TB03001C1	INORG	Vanadium	27.3		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001C1	INORG	Zinc	49.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB03001AB	RAD	ALPHA	19	4.00	pCi/g		MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	Am-241	1	10	pCi/g	UJ	MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	BETA	190	5.00	pCi/g		MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001R4	RAD	Co-60	742	07	pCi/g		SUBSUR	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001R4	RAD	Cs-137	16.3	1.16	pCi/g		SUBSUR	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	Pu-238	0	10	pCi/g	UJ	MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	Pu-239/240	0	10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	Sr-90	71	2.00	pCi/g		MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	U-234	1.1	10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	U-235	0	10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001AB	RAD	U-238	1.1	10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4,5-Trichlorophenol	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4-Dinitrophenol	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Nitroaniline	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	3-HEXENE-2,5-DIONE	260		ug/kg	JN	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	3-Nitroaniline	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Nitroaniline	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	4-Nitrophenol	890		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Acenaphthene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Anthracene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Carbazole	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Chrysene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Dibenz(a,h)anthracene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Dibenzofuran	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Diethylphthalate	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Dimethylphthalate	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Fluoranthene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP	Fluorene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB030010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Pentachlorophenol	890		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP Y		UNKNOWN	230		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP Y		UNKNOWN	510		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP Y		UNKNOWN	670		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP Y		UNKNOWN	20000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB030010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Acetone	14		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Carbon Tetrachloride	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Chloroform	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Chloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Methylene Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03001CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	23-25	01-JUN-93
2TB03101C1	INORG		Aluminum	6010		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG		Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date	
2TB03101C1	INORG	Arsenic	10		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Barium	122		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AN	INORG	Bromide	5.37		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Calcium	3580		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101AN	INORG	Chloride	1.99		MG/KG			SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Chromium	17.9		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Cobalt	4.9		MG/KG	B		P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Copper	14.8		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101AN	INORG	Fluoride	1.37		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Iron	12600		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Lead	8.7		MG/KG	S		F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Magnesium	3830		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Manganese	187		MG/KG	NJ		P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Mercury	.05		MG/KG	U		CV	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Nickel	18.2		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101AN	INORG	Nitrate/Nitrite as N	1.66		MG/KG			SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AN	INORG	Nitrite	.21		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AN	INORG	Orthophosphate(as P)	.42		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Potassium	1240		MG/KG			A	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Selenium	.21		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Silver	.43		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Sodium	150		MG/KG	B		P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101AN	INORG	Sulfate	7.83		MG/KG			SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101C1	INORG	Thallium	.21		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Vanadium	26		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101C1	INORG	Zinc	49.4		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101AB	RAD	ALPHA	18	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	Am-241	.1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	BETA	990	10.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101R4	RAD	Co-60	20.8	1.48	pCi/g			SUBSUR	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101R4	RAD	Cs-137	314	22.30	pCi/g			SUBSUR	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101R4	RAD	Eu-154	.613	.08	pCi/g			SUBSUR	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	Sr-90	410	5.00	pCi/g			MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	U-234	1.4	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	U-235	.1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB03101AB	RAD	U-238	1.3	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4,5-Trichlorophenol	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4-Dinitrophenol	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Chlorophenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Methylphenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Nitroaniline	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	2-Nitrophenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	
2TB031010SRE	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93	

Sample No.	Analysis	C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB031010SRE	SEMIS - CLP	Y	3-HEXENE-2,5-DIONE	430		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		3-Nitroaniline	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4,6-Dinitro-2-methylphenol	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Bromophenyl-phenylether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Chloro-3-methylphenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Chloroaniline	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Chlorophenyl-phenylether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Methylphenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Nitroaniline	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		4-Nitrophenol	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Acenaphthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Acenaphthylene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Anthracene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Benzo(a)anthracene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Benzo(a)pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Benzo(b)fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Carbazole	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Chrysene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Dibenzofuran	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Diethylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Dimethylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	FURAN, 2,5-DIMETHYL-	1000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Fluorene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Hexachloroethane	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	ISOMER OF C15H240	290		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Isophorone	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	METHANE, DICHLORO-	290		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Naphthalene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Nitrobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Pentachlorophenol	890		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Phenanthrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Phenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		Pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	350		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	1100		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	33000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	180		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	290		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	310		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	240		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	140		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	1700		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	490		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN	180		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN ALKANE	210		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93

Sample No.	Analysis	TC	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN ALKANE	230		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP	Y	UNKNOWN HYDROCARBON	610		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB031010SRE	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Acetone	18		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Carbon Tetrachloride	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Chloroform	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Chloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Methylene Chloride	3		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB03101CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	25-27	02-JUN-93
2TB032020S	SEMIS - CLP		1,2,4-Trichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		1,2-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		1,3-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		1,4-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4,5-Trichlorophenol	880		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4,6-Trichlorophenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4-Dichlorophenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4-Dimethylphenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4-Dinitrophenol	880		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,4-Dinitrotoluene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2,6-Dinitrotoluene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Chloronaphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Chlorophenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Methylnaphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Methylphenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Nitroaniline	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		2-Nitrophenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		3,3'-Dichlorobenzidine	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB032020S	SEMIS - CLP		3-Nitroaniline	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	3-PENTEN-2-ONE, 4-METHYL-	25000		ug/kg	JN		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	880		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Bromophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Chloro-3-methylphenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Chloroaniline	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Chlorophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Methylphenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Nitroaniline	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		4-Nitrophenol	880		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Acenaphthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Acenaphthylene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	BENZALDEHYDE	1200		ug/kg	JN		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	BENZENESULFONIC ACID, 4-HYDR	2700		ug/kg	JN		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	BENZOIC ACID, METHYL ESTER	500		ug/kg	JN		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Benzo(a)anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Benzo(a)pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Benzo(b)fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Benzo(g,h,i)perylene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Benzo(k)fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Butylbenzylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Carbazole	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Chrysene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Di-n-butylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Di-n-octylphthalate	150		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Dibenz(a,h)anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Dibenzofuran	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Diethylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Dimethylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	ETHANONE, 1-PHENYL-	430		ug/kg	JN		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Fluorene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Hexachlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Hexachlorobutadiene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Hexachlorocyclopentadiene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Hexachloroethane	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	ISOMER OC C9H12	450		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Isophorone	3300		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		N-Nitroso-di-n-propylamine	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		N-Nitrosodiphenylamine	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Naphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Nitrobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Pentachlorophenol	880		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Phenanthrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Phenol	350		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		Pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	2300		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	20000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	2000		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	5700		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	1500		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	860		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	3500		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	1200		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	4000		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	730		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB032020S	SEMIS - CLP	Y	UNKNOWN	400		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	550		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	18000		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP	Y	UNKNOWN	820		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		bis(2-Chloroethoxy)methane	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		bis(2-Chloroethyl)ether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB032020S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Acetone	9		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Carbon Tetrachloride	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Chloroform	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Chloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Methylene Chloride	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03202CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	27-29	02-JUN-93
2TB03201C1	INORG		Aluminum	6510		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Aluminum	4600		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Antimony	2.5		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Arsenic	3		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Arsenic	3.4		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Barium	112		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Barium	130		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG		Bromide	5.29		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG		Bromide	5.41		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Cadmium	1.1		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG		Calcium	2670		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG		Calcium	3260		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB03201AN	INORG	Chloride	2		MG/KG			SOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Chloride	1.98		MG/KG			SOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Chromium	21.3		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Chromium	31		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Cobalt	7.6		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Cobalt	5.2		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Copper	14.6		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Copper	12.8		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG	Fluoride	1.26		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Fluoride	1.49		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Iron	9650		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Iron	14000		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Lead	4.9		MG/KG			F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Lead	5.6		MG/KG		S	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Magnesium	3270		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Magnesium	4530		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Manganese	364		MG/KG		NJ	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Manganese	317		MG/KG		NJ	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Mercury	.06		MG/KG		B	CV	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Mercury	.05		MG/KG		U	CV	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Nickel	22		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Nickel	19.6		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Nitrate/Nitrite as N	1.9		MG/KG				SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG	Nitrate/Nitrite as N	2.17		MG/KG				SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG	Nitrite	.22		MG/KG		U		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Nitrite	.21		MG/KG		U		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Orthophosphate(as P)	.61		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG	Orthophosphate(as P)	.68		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Potassium	1140		MG/KG			A	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Potassium	903		MG/KG		B	A	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Selenium	.21		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Selenium	.22		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Silver	.43		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Silver	.42		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Sodium	120		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Sodium	130		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AN	INORG	Sulfate	20.4		MG/KG				SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AN	INORG	Sulfate	18.4		MG/KG				SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Thallium	.21		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Thallium	.22		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Vanadium	.29		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Vanadium	26.4		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204C1	INORG	Zinc	41.1		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201C1	INORG	Zinc	51.6		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	ALPHA	14	4.00	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	ALPHA	40	5.00	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	Am-241	.2	.10	pCi/g		J	MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	Am-241	.3	.10	pCi/g		J	MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	BETA	4780	20.00	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	BETA	6640	30.00	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201R4	RAD	Co-60	50.3	3.57	pCi/g			SUBSUR	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201R4	RAD	Cs-134	.314	.06	pCi/g			SUBSUR	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201R4	RAD	Cs-137	2000	142.00	pCi/g			SUBSUR	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201R4	RAD	Eu-154	1.08	.13	pCi/g			SUBSUR	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	Pu-238	.3	.10	pCi/g		J	MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	Pu-238	.2	.10	pCi/g		J	MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	Pu-239/240	.4	.10	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	Pu-239/240	.2	.10	pCi/g			MSOIL	UST SITE		BOREHOLE 1	27-31	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB03201AB	RAD	Sr-90	2220	5.00	pCi/g		MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	Sr-90	2280	5.00	pCi/g	J	MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	U-234	1.1	.10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	U-234	1.1	.10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	U-235	0	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	U-235	0	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03204AB	RAD	U-238	1.2	.10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB03201AB	RAD	U-238	1.1	.10	pCi/g		MSOIL	UST SITE	BOREHOLE 1	27-31	02-JUN-93
2TB032030S	SEMIS - CLP	1,2,4-Trichlorobenzene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	1,2-Dichlorobenzene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	1,3-Dichlorobenzene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	1,4-Dichlorobenzene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4,5-Trichlorophenol	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4,6-Trichlorophenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4-Dichlorophenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4-Dimethylphenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4-Dinitrophenol	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,4-Dinitrotoluene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2,6-Dinitrotoluene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Chloronaphthalene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Chlorophenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Methylnaphthalene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Methylphenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Nitroaniline	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	2-Nitrophenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	3,3'-Dichlorobenzidine	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP Y	3-HEXENE-2, 5-DIONE	180		ug/kg	JN	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	3-Nitroaniline	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Bromophenyl-phenylether	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Chloro-3-methylphenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Chloroaniline	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Chlorophenyl-phenylether	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Methylphenol	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Nitroaniline	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	4-Nitrophenol	920		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Acenaphthene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Acenaphthylene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Anthracene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Benzo(a)anthracene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Benzo(a)pyrene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Benzo(b)fluoranthene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Benzo(g,h,i)perylene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Benzo(k)fluoranthene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Butylbenzylphthalate	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Carbazole	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Chrysene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Di-n-butylphthalate	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Di-n-octylphthalate	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Dibenz(a,h)anthracene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Dibenzofuran	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Diethylphthalate	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Dimethylphthalate	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Fluoranthene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Fluorene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP Y	HEXANEDIOIC ACID, DIOCTYL ES	700		ug/kg	R	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Hexachlorobenzene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Hexachlorobutadiene	370		ug/kg	U	SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB032030S	SEMIS - CLP		Hexachlorocyclopentadiene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Hexachloroethane	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	ISOMER OF C5H8O	340		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	ISOMER OF C6H10O	3900		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Isophorone	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		N-Nitroso-di-n-propylamine	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		N-Nitrosodiphenylamine	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Naphthalene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Nitrobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Pentachlorophenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Phenanthrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Phenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		Pyrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	UNKNOWN	360		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	UNKNOWN	520		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	UNKNOWN	190		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	UNKNOWN	250		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP	Y	UNKNOWN	12000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		bis(2-Chloroethoxy)methane	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		bis(2-Chloroethyl)ether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB032030S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Acetone	10		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Chloroform	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Chloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Methylene Chloride	7		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP	Y	UNKNOWN	9		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93
2TB03203CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	29-31	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB033020S	SEMIS - CLP	1,2,4-Trichlorobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	1,2-Dichlorobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	1,3-Dichlorobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	1,4-Dichlorobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4,5-Trichlorophenol	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4,6-Trichlorophenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4-Dichlorophenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4-Dimethylphenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4-Dinitrophenol	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,4-Dinitrotoluene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2,6-Dinitrotoluene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Chloronaphthalene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Chlorophenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Methylnaphthalene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Methylphenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Nitroaniline	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	2-Nitrophenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	3,3'-Dichlorobenzidine	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	3-Nitroaniline	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Bromophenyl-phenylether	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Chloro-3-methylphenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Chloroaniline	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Chlorophenyl-phenylether	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Methylphenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Nitroaniline	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	4-Nitrophenol	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Acenaphthene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Acenaphthylene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Anthracene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Benzo(a)anthracene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Benzo(a)pyrene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Benzo(b)fluoranthene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Benzo(g,h,i)perylene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Benzo(k)fluoranthene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Butylbenzylphthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Carbazole	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Chrysene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Di-n-butylphthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Di-n-octylphthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Dibenz(a,h)anthracene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Dibenzofuran	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Diethylphthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Dimethylphthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Fluoranthene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Fluorene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Hexachlorobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Hexachlorobutadiene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Hexachlorocyclopentadiene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Hexachloroethane	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	ISOMER OF C6H10	410		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Isophorone	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	N-Nitroso-di-n-propylamine	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	N-Nitrosodiphenylamine	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Naphthalene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Nitrobenzene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93
2TB033020S	SEMIS - CLP	Pentachlorophenol	880		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB033020S	SEMIS - CLP	Phenanthrene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	Phenol	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	Pyrene	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP Y	UNKNOWN	390		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP Y	UNKNOWN	11000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	bis(2-Chloroethoxy)methane	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	bis(2-Chloroethyl)ether	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB033020S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,1-Dichloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,1-Dichloroethene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,2-Dichloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	1,2-Dichloropropane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	2-Butanone	10		ug/Kg	R		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	2-Hexanone	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	4-Methyl-2-Pentanone	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Acetone	11		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Benzene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Bromodichloromethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Bromoform	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Bromomethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Carbon Disulfide	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Carbon Tetrachloride	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Chlorobenzene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Chloroethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Chloroform	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Chloromethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Dibromochloromethane	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Ethylbenzene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Methylene Chloride	2		ug/Kg	J		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Styrene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Tetrachloroethene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Toluene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Trichloroethene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Vinyl Acetate	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Vinyl Chloride	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	Xylene (total)	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03302CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	31-33	02-JUN-93	
2TB03301C1	INORG	Aluminum	2640		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Arsenic	3.6		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Barium	80.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301AN	INORG	Bromide	5.33		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Calcium	2660		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301AN	INORG	Chloride	1.07		MG/KG	U		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Chromium	7.4		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Cobalt	3.6		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Copper	7.9		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301AN	INORG	Fluoride	1.77		MG/KG	J		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Iron	6200		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Lead	6.3		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date	
2TB03301C1	INORG	Magnesium	1740		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Manganese	218		MG/KG		NJ P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93	
2TB03301C1	INORG	Mercury	.05		MG/KG		U	CV	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Nickel	11.6		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301AN	INORG	Nitrate/Nitrite as N	2.04		MG/KG				SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301AN	INORG	Nitrite	.21		MG/KG		U		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301AN	INORG	Orthophosphate(as P)	.32		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Potassium	512		MG/KG		B	A	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Selenium	.21		MG/KG		NUJ	F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Silver	.43		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Sodium	69.1		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301AN	INORG	Sulfate	13.5		MG/KG		J		SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Thallium	.21		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Vanadium	20.3		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301C1	INORG	Zinc	28		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301R4	RAD	Co-60	15	1.07	pCi/g				SUBSUR	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB03301R4	RAD	Cs-137	3.46	.25	pCi/g				SUBSUR	UST SITE	BOREHOLE 1	31-35	02-JUN-93
2TB033030S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Chlorophenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Methylphenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Nitroaniline	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	2-Nitrophenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	3-Nitroaniline	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Chloroaniline	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Methylphenol	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Nitroaniline	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	4-Nitrophenol	900		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Acenaphthene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Acenaphthylene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Anthracene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Carbazole	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Chrysene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Dibenz(a,h)anthracene	360		ug/kg		UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB03303CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB02601C1	INORG	Aluminum	40		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Antimony	12		UG/L	U	NUJ	F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Arsenic	1		UG/L	U		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Barium	5		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Beryllium	5		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Bromide	500		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Cadmium	5		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Calcium	479		UG/L	B		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Chloride	190		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Chromium	6		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Cobalt	17		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Copper	9		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Fluoride	50		UG/L	UJ		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Iron	22		UG/L	U		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Lead	15.5		UG/L	U		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Magnesium	167		UG/L	B		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Manganese	4		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Mercury	.1		UG/L	U		CV WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Nickel	18		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Nitrate/Nitrite as N	137		UG/L	J		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Nitrite	20		UG/L	UJ		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Orthophosphate(as P)	10		UG/L	R		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Potassium	181		UG/L	U		A WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Selenium	1		UG/L	U		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Silver	2		UG/L	UN		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Sodium	137		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AN	INORG	Sulfate	500		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Thallium	1		UG/L	U		F WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Vanadium	24		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601C1	INORG	Zinc	6		UG/L	U		P WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	ALPHA	0	.40	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	Am-241	.1	.10	pCi/L	UJ		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	BETA	0	.70	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601R4	RAD	GAMMA ND			pCi/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	Pu-238	0	.10	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	Pu-239/240	0	.10	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	Sr-90	.1	.30	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	U-234	0	.10	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	U-235	0	.10	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601AB	RAD	U-238	0	.10	pCi/L	U		NWATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	1,2,4-Trichlorobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	1,2-Dichlorobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	1,3-Dichlorobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	1,4-Dichlorobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4,5-Trichlorophenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4,6-Trichlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4-Dichlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4-Dimethylphenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4-Dinitrophenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,4-Dinitrotoluene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2,6-Dinitrotoluene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Chloronaphthalene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Chlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Methylnaphthalene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Nitroaniline	25		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	2-Nitrophenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB033030S	SEMIS - CLP	Dibenzofuran	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Diethylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Dimethylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Fluorene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Hexachlorobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Hexachlorobutadiene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Hexachlorocyclopentadiene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Hexachloroethane	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Isophorone	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	N-Nitroso-di-n-propylamine	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	N-Nitrosodiphenylamine	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Naphthalene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Nitrobenzene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Pentachlorophenol	900		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Phenanthrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Phenol	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	Pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	UNKNOWN	260		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	UNKNOWN	7000		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	bis(2-Chloroethoxy)methane	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	bis(2-Chloroethyl)ether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB033030S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Acetone	10		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Chloroform	2		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Chloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Methylene Chloride	3		ug/kg	J		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93
2TB03303CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 1	33-35	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB026010S	SEMIS - CLP	3,3'-Dichlorobenzidine	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	3-Nitroaniline	25		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Bromophenyl-phenylether	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Chloro-3-methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Chloroaniline	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Chlorophenyl-phenylether	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Nitroaniline	25		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	4-Nitrophenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Acenaphthene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Acenaphthylene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Anthracene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Benzo(a)anthracene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Benzo(a)pyrene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Benzo(b)fluoranthene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Benzo(g,h,i)perylene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Benzo(k)fluoranthene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Butylbenzylphthalate	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Carbazole	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Chrysene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Di-n-butylphthalate	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Di-n-octylphthalate	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Dibenz(a,h)anthracene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Dibenzofuran	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Diethylphthalate	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Dimethylphthalate	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Fluoranthene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Fluorene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Hexachlorobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Hexachlorobutadiene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Hexachlorocyclopentadiene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Hexachloroethane	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Isophorone	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	N-Nitroso-di-n-propylamine	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	N-Nitrosodiphenylamine	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Naphthalene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Nitrobenzene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Pentachlorophenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Phenanthrene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Phenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Pyrene	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	Y UNKNOWN	5		ug/L	J		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	bis(2-Chloroethyl)ether	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB026010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	10		ug/L	J		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,1-Dichloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	2-Butanone	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	2-Hexanone	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB02601CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Acetone	11		ug/L			WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	Y	BUTANE, 1-CHLORO	7		ug/L		JN	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Benzene	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Bromodichloromethane	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Bromoform	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Bromomethane	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP	Y	COLUMN BLEED	6		ug/L		R	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Carbon Disulfide	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Chlorobenzene	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Chloroethane	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Chloroform	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Chloromethane	16		ug/L			WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Dibromochloromethane	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Ethylbenzene	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Methylene Chloride	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Styrene	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Tetrachloroethene	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Toluene	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Trichloroethene	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Vinyl Acetate	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Vinyl Chloride	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		Xylene (total)	10		ug/L		UJ	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		cis-1,3-Dichloropropene	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB02601CV	VOAS - CLP		trans-1,3-Dichloropropene	10		ug/L		U	WATER	FIELD BLANK	BOREHOLE 2	N/A	10-JUN-93
2TB01601C1	INORG		Aluminum	4400		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Antimony	2.6		MG/KG		NUJ	F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Arsenic	3.3		MG/KG			F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Barium	75.5		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Beryllium	1.1		MG/KG		U	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Cadmium	1.3		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Calcium	7600		MG/KG		*J	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Chromium	17.4		MG/KG		*J	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Cobalt	4		MG/KG		B	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Copper	10.9		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Iron	11000		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Lead	11		MG/KG		S	F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Magnesium	3660		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Manganese	176		MG/KG		NJ	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Mercury	.05		MG/KG		U	CV	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Nickel	14.2		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Potassium	638		MG/KG		B	A	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Selenium	.21		MG/KG		NWUJ	F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Silver	.43		MG/KG		U	F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Sodium	107		MG/KG		B	P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Thallium	.21		MG/KG		WUJ	F	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Vanadium	27.2		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601C1	INORG		Zinc	98.8		MG/KG			P	SOIL	UST SITE	13-15	09-JUN-93
2TB01601AB	RAD		ALPHA	20	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		Am-241	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		BETA	29	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601R4	RAD		Cs-137	.315	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		Pu-238	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		Pu-239/240	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		Sr-90	4.3	.30	pCi/g		J	MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		U-234	.9	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601AB	RAD		U-235	.1	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93

Sample No.	Analysis	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB016010AB	RAD	U-238	.9	.10	pCi/g		MSOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	1,2,4-Trichlorobenzene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	1,2-Dichlorobenzene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	1,3-Dichlorobenzene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	1,4-Dichlorobenzene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4,5-Trichlorophenol	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4,6-Trichlorophenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4-Dichlorophenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4-Dimethylphenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4-Dinitrophenol	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,4-Dinitrotoluene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2,6-Dinitrotoluene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Chloronaphthalene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Chlorophenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Methylnaphthalene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Methylphenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Nitroaniline	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	2-Nitrophenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	3,3'-Dichlorobenzidine	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP Y	3-HEXENE-2,5-DIONE	330	ug/kg	JN		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	3-Nitroaniline	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4,6-Dinitro-2-methylphenol	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Bromophenyl-phenylether	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Chloro-3-methylphenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Chloroaniline	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Chlorophenyl-phenylether	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Methylphenol	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Nitroaniline	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	4-Nitrophenol	1800	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Acenaphthene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Acenaphthylene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Anthracene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Benzo(a)anthracene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Benzo(a)pyrene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Benzo(b)fluoranthene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Benzo(g,h,i)perylene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Benzo(k)fluoranthene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Butylbenzylphthalate	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Carbazole	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Chrysene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Di-n-butylphthalate	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Di-n-octylphthalate	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Dibenz(a,h)anthracene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Dibenzofuran	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Diethylphthalate	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Dimethylphthalate	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Fluoranthene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Fluorene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Hexachlorobenzene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Hexachlorobutadiene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Hexachlorocyclopentadiene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Hexachloroethane	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Isophorone	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP Y	METHANE, DICHLORO-	2000	ug/kg	R		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	N-Nitroso-di-n-propylamine	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	N-Nitrosodiphenylamine	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Naphthalene	710	ug/kg	UJ		SOIL	UST SITE		BOREHOLE 2	13-15	07-JUN-93

Sample No.	Analysis	Y I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB016010SRE	SEMIS - CLP		Nitrobenzene	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		Pentachlorophenol	1800		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		Phenanthrene	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		Phenol	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		Pyrene	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Y	UNKNOWN	1500		ug/kg	R		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP	Y	UNKNOWN	6200		ug/kg	R		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		bis(2-Chloroethoxy)methane	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		bis(2-Chloroethyl)ether	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		bis(2-Chloroisopropyl)ether	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB016010SRE	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	710		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Acetone	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Chloroform	3		ug/kg	J		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Chloromethane	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Methylene Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01601CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2	13-15	07-JUN-93
2TB01701R4	RAD		Cs-137	.29	.04	pCi/g			SUBSUR	UST SITE	BOREHOLE 2	17-19	07-JUN-93
2TB045010S	SEMIS - CLP		1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4,5-Trichlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4-Dinitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB045010S	SEMIS - CLP		2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93

Sample No.	Analysis	T I C	Compound	Rad			Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
				Concentration	Uncert.	Units Q Flags						
2TB045010S	SEMIS - CLP		2-Chlorophenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		2-Methylnaphthalene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		2-Methylphenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		2-Nitroaniline	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		2-Nitrophenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		3,3'-Dichlorobenzidine	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		3-Nitroaniline	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Bromophenyl-phenylether	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Chloro-3-methylphenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Chloroaniline	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Chlorophenyl-phenylether	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Methylphenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Nitroaniline	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		4-Nitrophenol	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Acenaphthene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Acenaphthylene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Anthracene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Benzo(a)anthracene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Benzo(a)pyrene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Benzo(b)fluoranthene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Carbazole	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Chrysene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
A-45 2TB045010S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Dibenzofuran	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Diethylphthalate	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Dimethylphthalate	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Fluoranthene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Fluorene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Hexachloroethane	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Isophorone	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		METHANE, DICHLORO-	5300		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		METHANE, DICHLORO-	4100		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Naphthalene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Nitrobenzene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Pentachlorophenol	900		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Phenanthrene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Phenol	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		Pyrene	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		UNKNOWN	200		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		UNKNOWN	900		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		UNKNOWN	21000		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		UNKNOWN	170		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP Y		UNKNOWN	320		ug/kg R	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	
2TB045010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg U	SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93	

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB045010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Acetone	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Chloroform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Chloromethane	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Methylene Chloride	16		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	21-23	09-JUN-93
2TB04501C1	INORG	Aluminum	6350		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Aluminum	4850		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Antimony	2.6		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Arsenic	2.5		MG/KG		F	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Arsenic	2.9		MG/KG		F	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Barium	97.5		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Barium	78.7		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Bromide	5.4		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Bromide	5.41		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Calcium	9640		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Calcium	7760		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Chloride	2.19		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Chloride	2.82		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Chromium	22.1		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Chromium	17.2		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Cobalt	5.7		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Cobalt	5.1		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Copper	14.3		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04502C1	INORG	Copper	12.8		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Fluoride	.92		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Fluoride	.82		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Iron	12700		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Iron	9590		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Lead	10.6		MG/KG	S		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Lead	7		MG/KG			F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Magnesium	4690		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Magnesium	4130		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Manganese	246		MG/KG	NJ		P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Manganese	213		MG/KG	NJ		P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Mercury	.05		MG/KG	U		CV SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Mercury	.05		MG/KG	U		CV SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Nickel	20		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Nickel	15.2		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Nitrate/Nitrite as N	.5		MG/KG			SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Nitrate/Nitrite as N	.42		MG/KG			SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Nitrite	.22		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Nitrite	.22		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Orthophosphate(as P)	.15		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Orthophosphate(as P)	.21		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Potassium	1010		MG/KG	B		A SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Potassium	736		MG/KG	B		A SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Selenium	.22		MG/KG	NWUJ		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Selenium	.22		MG/KG	NWUJ		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Silver	.43		MG/KG	U		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Silver	.43		MG/KG	U		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Sodium	85.1		MG/KG	BU		P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Sodium	65.2		MG/KG	BU		P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AN	INORG	Sulfate	5.4		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AN	INORG	Sulfate	5.41		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Thallium	.22		MG/KG	U		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Thallium	.22		MG/KG	U		F SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Vanadium	32.6		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Vanadium	32.5		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501C1	INORG	Zinc	49.2		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502C1	INORG	Zinc	42.2		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	ALPHA	13	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	ALPHA	21	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	Am-241	1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	BETA	27	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	BETA	25	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501R4	RAD	GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502R4	RAD	GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	Sr-90	3.1	.30	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	Sr-90	.1	.20	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	U-234	.6	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	U-234	.8	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04501AB	RAD	U-238	.6	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB04502AB	RAD	U-238	.8	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	21-25	09-JUN-93
2TB045020S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB045020S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP Y	3-HEXENE-2,5-DIONE	230		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP Y	CYCLOPROPANE, 1,1,2,2-TETRAM	200		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP Y	ISOMER OF C15H240	330		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	23-25	09-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB045020S	SEMIS - CLP		Pentachlorophenol	900		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Y	UNKNOWN	400		ug/kg	J		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Y	UNKNOWN	890		ug/kg	R		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Y	UNKNOWN	22000		ug/kg	R		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Y	UNKNOWN	160		ug/kg	R		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP	Y	UNKNOWN	180		ug/kg	J		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB045020S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		2-Butanone	11		ug/Kg	R		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		2-Hexanone	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Acetone	17		ug/Kg	UJ		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Benzene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Bromodichloromethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Bromoform	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Bromomethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Carbon Disulfide	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Chlorobenzene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Chloroethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Chloroform	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Chloromethane	11		ug/Kg	UJ		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Dibromochloromethane	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Ethylbenzene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Methylene Chloride	18		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Styrene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Tetrachloroethene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Toluene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Trichloroethene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Vinyl Acetate	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Vinyl Chloride	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		Xylene (total)	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04502CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	23-25	09-JUN-93
2TB04601C1	INORG		Aluminum	4750		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Antimony	2.5		MG/KG	NUJ	F	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Arsenic	2.3		MG/KG	S	F	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Barium	93.1		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Beryllium	1		MG/KG	U	P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG		Bromide	5.44		MG/KG	U		SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Cadmium	1		MG/KG	U	P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Calcium	3380		MG/KG	*J	P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG		Chloride	3.58		MG/KG			SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Chromium	14.8		MG/KG	*J	P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG		Cobalt	5.6		MG/KG	B	P	SOIL	UST	SITE	BOREHOLE 2A	25-27	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04601C1	INORG	Copper	17		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG	Fluoride	.95		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Iron	11200		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Lead	6.8		MG/KG		S	F SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Magnesium	3610		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Manganese	257		MG/KG		NJ	P SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Mercury	.05		MG/KG		U	CV SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Nickel	18.3		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG	Nitrate/Nitrite as N	.41		MG/KG			SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG	Nitrite	.22		MG/KG		U	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AN	INORG	Orthophosphate(as P)	.11		MG/KG		UJ	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Potassium	777		MG/KG		B	A SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Selenium	1		MG/KG		NUJ	F SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Silver	.41		MG/KG		U	F SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Sodium	75.2		MG/KG		BU	P SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TR05001AN	INORG	Sulfate	5.44		MG/KG		U	SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Thallium	.21		MG/KG		WUJ	F SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Vanadium	28.1		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601C1	INORG	Zinc	44.5		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	ALPHA	18	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	Am-241	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	BETA	59	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601R4	RAD	Co-60	.45		pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB04601R4	RAD	Cs-137	15.9	1.13	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	Pu-238	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	Pu-239/240	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	Sr-90	7.3	.50	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TR05001AB	RAD	U-234	.7	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	U-235	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001AB	RAD	U-238	.8	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	25-27	09-JUN-93
2TB05001C1	INORG	Aluminum	5180		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Antimony	2.6		MG/KG		NUJ	F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Arsenic	2.7		MG/KG			F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Barium	117		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Beryllium	1.1		MG/KG		U	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Bromide	5.17		MG/KG		U	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Cadmium	1.1		MG/KG		U	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Calcium	2980		MG/KG		*J	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Chloride	2.61		MG/KG			SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Chromium	15.7		MG/KG		*J	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Cobalt	5.4		MG/KG		B	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Copper	14.2		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Fluoride	.77		MG/KG		J	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Iron	11100		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Lead	16.4		MG/KG		S	F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Magnesium	3330		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Manganese	224		MG/KG		NJ	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Mercury	.05		MG/KG		U	CV SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Nickel	17.7		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Nitrate/Nitrite as N	.32		MG/KG			SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Nitrite	.21		MG/KG		U	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Orthophosphate(as P)	.1		MG/KG		UJ	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Potassium	783		MG/KG		B	A SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Selenium	.22		MG/KG		NWUJ	F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Silver	.44		MG/KG		U	F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Sodium	79.1		MG/KG		BU	P SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AN	INORG	Sulfate	6.52		MG/KG			SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Thallium	.22		MG/KG		UW	F SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB05001C1	INORG	Vanadium	29.2		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001C1	INORG	Zinc	52.1		MG/KG		P	SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	ALPHA	25	5.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	BETA	44	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001R4	RAD	Co-60	2.71	.20	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB05001R4	RAD	Cs-137	13.9	1.01	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	Sr-90	.3	.30	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	U-234	.7	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	U-235	.1	100.00	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601AB	RAD	U-238	.6	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	1,2,4-Trichlorobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	1,2-Dichlorobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	1,3-Dichlorobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	1,4-Dichlorobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4,5-Trichlorophenol	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4,6-Trichlorophenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4-Dichlorophenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4-Dimethylphenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4-Dinitrophenol	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,4-Dinitrotoluene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2,6-Dinitrotoluene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Chloronaphthalene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Chlorophenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Methylnaphthalene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Methylphenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Nitroaniline	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	2-Nitrophenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	3,3'-Dichlorobenzidine	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP Y	3-HEXENE-2,5-DIONE	200		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	3-Nitroaniline	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Bromophenyl-phenylether	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Chloro-3-methylphenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Chloroaniline	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Chlorophenyl-phenylether	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Methylphenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Nitroaniline	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	4-Nitrophenol	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Acenaphthene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Acenaphthylene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Anthracene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Benzo(a)anthracene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Benzo(a)pyrene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Benzo(b)fluoranthene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Benzo(g,h,i)perylene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Benzo(k)fluoranthene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Butylbenzylphthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Carbazole	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Chrysene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Di-n-butylphthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Di-n-octylphthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Dibenz(a,h)anthracene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Dibenzofuran	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Diethylphthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Dimethylphthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB046010S	SEMIS - CLP	Y	FURAN, 2,5-DIHYDRO-2,5-DIMET	190		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Fluoranthene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Fluorene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Hexachlorobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Hexachlorobutadiene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Hexachlorocyclopentadiene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Hexachloroethane	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	ISOMER OF C15H24O	290		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Indeno[1,2,3-cd]pyrene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Isophorone	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	METHANE, DICHLORO-	6000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		N-Nitrosodiphenylamine	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Naphthalene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Nitrobenzene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Pentachlorophenol	860		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Phenanthrene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Phenol	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		Pyrene	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	UNKNOWN	2000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	UNKNOWN	170		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	UNKNOWN	23000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP	Y	UNKNOWN	990		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		bis(2-Chloroethyl)ether	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB046010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	340		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,1,2-Trichloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,1-Dichloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,1-Dichloroethene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,2-Dichloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,2-Dichloroethene (total)	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		1,2-Dichloropropane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		2-Butanone	10		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		2-Hexanone	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Acetone	6		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Benzene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Bromodichloromethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Bromoform	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Bromomethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Carbon Disulfide	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Carbon Tetrachloride	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Chlorobenzene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Chloroethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Chloroform	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Chloromethane	10		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Dibromochloromethane	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Ethylbenzene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Methylene Chloride	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Styrene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Tetrachloroethene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Toluene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Trichloroethene	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Vinyl Acetate	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP		Vinyl Chloride	10		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	27-29	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB04601CV	VOAS - CLP	Xylene (total)	10		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04601CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST	SITE	BOREHOLE 2A	27-29	09-JUN-93
2TB04801C1	INORG	Aluminum	4210		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Antimony	2.6		MG/KG		NUJ	F SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Arsenic	4.1		MG/KG		F	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Barium	131		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Bromide	5.44		MG/KG	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Cadmium	1.1		MG/KG	U	P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Calcium	3010		MG/KG		*J	P SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Chloride	2.5		MG/KG			SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Chromium	9.3		MG/KG		*J	P SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Cobalt	4.4		MG/KG	B	P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Copper	12.3		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Fluoride	.83		MG/KG	J		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Iron	8720		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Lead	8.9		MG/KG		S	F SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Magnesium	2780		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Manganese	248		MG/KG		NJ	P SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Mercury	.05		MG/KG	U		CV SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Nickel	15.5		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Nitrate/Nitrite as N	.34		MG/KG			SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Nitrite	.22		MG/KG	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Orthophosphate(as P)	.15		MG/KG	J		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Potassium	690		MG/KG	B		A SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Selenium	.22		MG/KG		NWUJ	F SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Silver	.44		MG/KG	U		F SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Sodium	61		MG/KG	BU		P SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AN	INORG	Sulfate	5.44		MG/KG	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Thallium	.22		MG/KG		WUJ	F SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Vanadium	23.7		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801C1	INORG	Zinc	37.2		MG/KG		P	SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	ALPHA	20	4.00	pCi/g			MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	Am-241	0	.10	pCi/g		UJ	MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	BETA	36	3.00	pCi/g			MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801R4	RAD	Ce-60	2.1	.16	pCi/g			SUBSUR	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801R4	RAD	Cs-137	.184	.03	pCi/g			SUBSUR	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	Pu-238	0	.10	pCi/g		UJ	MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	Sr-90	1.9	.30	pCi/g			MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	U-234	.7	.10	pCi/g			MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801AB	RAD	U-238	.7	.10	pCi/g			MSOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801OS	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST	SITE	BOREHOLE 2A	31-33	09-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB048010S	SEMIS - CLP		2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		2-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	3-HEXENE-2,5-DIONE	210		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		3-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	3-PENTEN-2-ONE, 4-METHYL-	220		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	ISOMER OF C15H24O	280		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	METHANE, DICHLORO-	8300		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Pentachlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	UNKNOWN	660		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP	Y	UNKNOWN	16000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB048010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	74		ug/kg	J		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04801CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Acetone	14		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Chloromethane	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Methylene Chloride	15		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04801CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	31-33	09-JUN-93
2TB04901C1	INORG	Aluminum	4950		MG/KG			P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Antimony	2.7		MG/KG	NUJ	F	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Arsenic	2.1		MG/KG	B	F	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Barium	104		MG/KG		P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Beryllium	1.1		MG/KG	U	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Bromide	5.56		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Cadmium	1.1		MG/KG	U	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Calcium	4750		MG/KG	*J	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Chloride	2.53		MG/KG			SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Chromium	15.4		MG/KG	*J	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Cobalt	5.9		MG/KG	B	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Copper	14.7		MG/KG		P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Fluoride	.87		MG/KG	J		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Iron	11100		MG/KG		P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Lead	225		MG/KG		F	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Magnesium	3410		MG/KG		P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Manganese	179		MG/KG	NJ	P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Mercury	.06		MG/KG	U	CV	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Nickel	14.9		MG/KG		P	P SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Nitrate/Nitrite as N	.36		MG/KG			SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Nitrite	.22		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AN	INORG	Orthophosphate(as P)	.11		MG/KG	UJ		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Potassium	814		MG/KG	B	A	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Selenium	.22		MG/KG	NUJ	F	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Silver	.44		MG/KG	U	F	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Sodium	91.3		MG/KG	BU	P	SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04901AN	INORG	Sulfate	5.56		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Thallium	.22		MG/KG	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Vanadium	31.6		MG/KG			SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901C1	INORG	Zinc	45.1		MG/KG			SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	ALPHA	21	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	BETA	36	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901R4	RAD	Co-60	1.79	.13	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901R4	RAD	Cs-137	.199	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	Sr-90	1.6	.30	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	U-234	.8	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	U-235	.1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901AB	RAD	U-238	.8	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	1,2,4-Trichlorobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	1,2-Dichlorobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	1,3-Dichlorobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	1,4-Dichlorobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4,5-Trichlorophenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4,6-Trichlorophenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4-Dichlorophenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4-Dimethylphenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4-Dinitrophenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,4-Dinitrotoluene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2,6-Dinitrotoluene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Chloronaphthalene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Chlorophenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Methylnaphthalene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Methylphenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Nitroaniline	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	2-Nitrophenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	3,3'-Dichlorobenzidine	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	3-HEXENE-2,5-DIONE	210		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	3-HEXENE-2,5-DIONE	180		ug/kg	JN		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	3-Nitroaniline	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	3-PENTEN-2-ONE, 4-METHYL-	280		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Bromophenyl-phenylether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Chloro-3-methylphenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Chloroaniline	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Chlorophenyl-phenylether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Methylphenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Nitroaniline	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	4-Nitrophenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Acenaphthene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Acenaphthylene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Anthracene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Benzo(a)anthracene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Benzo(a)pyrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Benzo(b)fluoranthene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Benzo(g,h,i)perylene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Benzo(k)fluoranthene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Butylbenzylphthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Carbazole	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Chrysene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Di-n-butylphthalate	40		ug/kg	J		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Di-n-octylphthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93

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Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB049010S	SEMIS - CLP	Dibenz(a,h)anthracene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Dibenzofuran	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Diethylphthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Dimethylphthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Fluoranthene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Fluorene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Hexachlorobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Hexachlorobutadiene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Hexachlorocyclopentadiene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Hexachloroethane	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Isophorone	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	METHANE, DICHLORO-	4000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	N-Nitroso-di-n-propylamine	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	N-Nitrosodiphenylamine	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Naphthalene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Nitrobenzene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Pentachlorophenol	920		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Phenanthrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Phenol	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	Pyrene	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	UNKNOWN	990		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	UNKNOWN	180		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	UNKNOWN	24000		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP Y	UNKNOWN HYDROCARBON	340		ug/kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	bis(2-Chloroethyl)ether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB049010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	370		ug/kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Acetone	22		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Chloromethane	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Methylene Chloride	20		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93
2TB04901CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date	
2TB04901CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93	
2TB04901CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93	
2TB04901CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93	
2TB04901CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93	
2TB04901CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 2A	35-37	09-JUN-93	
2TB05101C1	INORG	Aluminum	4860		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Antimony	2.6		MG/KG		NUJ	F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Arsenic	2.7		MG/KG			F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Barium	95.3		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Beryllium	1.1		MG/KG		U	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Cadmium	1.1		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Calcium	6830		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Chromium	20.4		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Cobalt	7.2		MG/KG		B	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Copper	13.7		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Iron	12300		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Lead	6.8		MG/KG			F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Magnesium	5210		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Manganese	207		MG/KG		NJ	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Mercury	.05		MG/KG		U	CV	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Nickel	21.1		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Potassium	611		MG/KG		B	A	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Selenium	.22		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Silver	.43		MG/KG		U	F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Sodium	106		MG/KG		BU	P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Thallium	.22		MG/KG		WUJ	F	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Vanadium	32.4		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101C1	INORG	Zinc	50.8		MG/KG			P	SOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93
2TB05101AB	RAD	ALPHA	21	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	Am-241	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	BETA	28	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101R4	RAD	Co-60	1.15	.09	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101R4	RAD	Cs-137	.143	.02	pCi/g			SUBSUR	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	Pu-238	0	.10	pCi/g		UJ	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	Pu-239/240	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	Sr-90	.5	.30	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	U-234	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	U-235	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB05101AB	RAD	U-238	0	.10	pCi/g		U	MSOIL	UST SITE	BOREHOLE 2A	37-38.3	09-JUN-93	
2TB01501C1	INORG	Aluminum	40		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Antimony	14		ug/L		U	F	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Arsenic	1		ug/L		U	F	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Barium	5		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Beryllium	5		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501AN	INORG	Bromide	100		ug/L		U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Cadmium	5		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Calcium	37.6		ug/L		BU	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501AN	INORG	Chloride	1000		ug/L		U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Chromium	6		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Cobalt	17		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Copper	9		ug/L		U	F	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501AN	INORG	Fluoride	50		ug/L		UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Iron	22		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Lead	13.9		ug/L			F	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Magnesium	82		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Manganese	4		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Mercury	.16		ug/L		B	CV	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Nickel	18		ug/L		U	P	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB01501AN	INORG	Nitrate	125		ug/L	J	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501AN	INORG	Nitrite	20		ug/L	UJ	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501AN	INORG	Orthophosphate(as P)	10		ug/L	R	WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501C1	INORG	Potassium	121		ug/L	U	A	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Selenium	1		ug/L	U	F	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Silver	2		ug/L	U	F	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Sodium	286		ug/L	B	P	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AN	INORG	Sulfate	500		ug/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Thallium	1		ug/L	U	F	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Vanadium	24		ug/L	U	P	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501C1	INORG	Zinc	14.5		ug/L	B	P	WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	ALPHA	.1		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	Am-241	0		pci/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	BETA	1.7		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501R4	RAD	GAMMA ND			pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	Pu-238	0		pci/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	Pu-239/240	0		pci/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	Sr-90	.2		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	U-234	.1		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	U-235	0		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB01501AB	RAD	U-238	0		pci/L	U		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	1,2,4-Trichlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	1,2-Dichlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	1,3-Dichlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	1,4-Dichlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4,5-Trichlorophenol	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4,6-Trichlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4-Dichlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4-Dimethylphenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4-Dinitrophenol	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,4-Dinitrotoluene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2,6-Dinitrotoluene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Chloronaphthalene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Chlorophenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Methylnaphthalene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Nitroaniline	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	2-Nitrophenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	3,3'-Dichlorobenzidine	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	3-Nitroaniline	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Bromophenyl-phenylether	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Chloro-3-methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Chloroaniline	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Chlorophenyl-phenylether	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Methylphenol	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Nitroaniline	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	4-Nitrophenol	25		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Acenaphthene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Acenaphthylene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Anthracene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Benzo(a)anthracene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Benzo(a)pyrene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Benzo(b)fluoranthene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Benzo(g,h,i)perylene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Benzo(k)fluoranthene	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Butylbenzylphthalate	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93
2TB015010S	SEMIS - CLP	Carbazole	10		ug/L	UJ		WATER	FIELD BLANK	N/A	14-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB015010S	SEMIS - CLP		Chrysene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Di-n-butylphthalate	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Di-n-octylphthalate	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Dibenz(a,h)anthracene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Dibenzofuran	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Diethylphthalate	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Dimethylphthalate	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Fluoranthene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Fluorene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Hexachlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Hexachlorobutadiene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Hexachlorocyclopentadiene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Hexachloroethane	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Isophorone	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		N-Nitrosodiphenylamine	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Naphthalene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Nitrobenzene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Pentachlorophenol	25		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Phenanthrene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Phenol	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		Pyrene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		bis(2-Chloroethyl)ether	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB015010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	9		ug/L	J		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,1,2-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,1-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,1-Dichloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,2-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,2-Dichloroethene (total)	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		1,2-Dichloropropane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		2-Butanone	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Acetone	15		ug/L	J		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Benzene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP	Y	COLUMN BLEED	6		ug/L	R		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Chlorobenzene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Chloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Chloroform	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Chloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Dibromochloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Ethylbenzene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Methylene Chloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Styrene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Tetrachloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Toluene	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Trichloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP		Vinyl Acetate	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93

Sample No.	Analysis	T I C Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB01501CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP	Xylene (total)	10		ug/L	UJ		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01501CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 3	N/A	14-JUN-93
2TB01001C1	INORG	Aluminum	5080		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Antimony	3		mg/kg		NWUJ	F SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Arsenic	3.1		mg/kg		F	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Barium	129		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Bromide	1.06		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Calcium	13400		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Chloride	10.6		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Chromium	14.9		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Cobalt	7		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Copper	16.1		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Fluoride	1.25		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Iron	10900		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Lead	14.5		mg/kg		NSR	F SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Magnesium	3830		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Manganese	195		mg/kg		N*UJ	P SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Mercury	.05		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Nickel	14.6		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Nitrate	2.95		mg/kg			SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Nitrite	.21		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Orthophosphate(as P)	.86		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Potassium	822		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Selenium	.21		mg/kg		NWUJ	F SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Silver	.82		mg/kg	BU	F	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Sodium	53.3		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AN	INORG	Sulfate	5.29		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Thallium	.21		mg/kg		WUJ	F SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Vanadium	17.1		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001C1	INORG	Zinc	50.7		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	ALPHA	24	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	BETA	67	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001R4	RAD	Co-60	.919	.08	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001R4	RAD	Cs-137	33	2.34	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	Sr-90	7.8	.40	pCi/g			MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	U-234	.9	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB01001AB	RAD	U-238	.9	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	0-0.5	10-JUN-93
2TB00201C1	INORG	Aluminum	5830		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Antimony	3		mg/kg		NWUJ	F SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Arsenic	5		mg/kg		F	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Barium	145		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Bromide	1.05		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Calcium	12900		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Chloride	10.5		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Chromium	18.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Cobalt	8.3		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Copper	18.9		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Fluoride	1.62		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date	
2TB00201C1	INORG	Iron	12200		mg/kg		P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201C1	INORG	Lead	77.4		mg/kg		NSR	F	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Magnesium	4290		mg/kg		U	P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Manganese	227		mg/kg		N*UJ	P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Mercury	.05		mg/kg		U	CV	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Nickel	19.6		mg/kg		U	F	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Nitrate	.6		mg/kg				SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Nitrite	.26		mg/kg				SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Orthophosphate(as P)	.38		mg/kg		J		SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Potassium	914		mg/kg		BU	A	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Selenium	.21		mg/kg		NUJ	F	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Silver	.42		mg/kg		U	F	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Sodium	101		mg/kg		BU	P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AN	INORG	Sulfate	5.27		mg/kg		U		SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Thallium	.21		mg/kg		U	F	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Vanadium	29.3		mg/kg			P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201C1	INORG	Zinc	59.2		mg/kg		U	P	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201AB	RAD	ALPHA	27	4.00	pCi/g			MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	Am-241	0	.10	pCi/g		UJ	MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	BETA	34	3.00	pCi/g			MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201R4	RAD	Co-60	.346	.04	pCi/g			SUBSUR	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201R4	RAD	Cs-137	1.86	.15	pCi/g			SUBSUR	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	Pu-238	0	.10	pCi/g		UJ	MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	Pu-239/240	0	.10	pCi/g		U	MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	Sr-90	.2	.20	pCi/g		U	MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	U-234	1.1	.10	pCi/g			MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	U-235	0	.10	pCi/g		U	MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB00201AB	RAD	U-238	1.1	.10	pCi/g			MSOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	1,2,4-Trichlorobenzene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	1,2-Dichlorobenzene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	1,3-Dichlorobenzene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	1,4-Dichlorobenzene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4,5-Trichlorophenol	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4,6-Trichlorophenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4-Dichlorophenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4-Dimethylphenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4-Dinitrophenol	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,4-Dinitrotoluene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2,6-Dinitrotoluene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Chloronaphthalene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Chlorophenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Methylnaphthalene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Methylphenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Nitroaniline	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	2-Nitrophenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP Y	2-PENTANONE, 4-HYDROXY-4-MET	3600		ug/kg		R	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	3,3'-Dichlorobenzidine	350		ug/kg		UJ	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP Y	3-BUTEN-2-ONE, 3-METHYL-	330		ug/kg		J	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	3-Nitroaniline	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Bromophenyl-phenylether	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Chloro-3-methylphenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Chloroaniline	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Chlorophenyl-phenylether	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Methylphenol	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Nitroaniline	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	4-Nitrophenol	880		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	
2TB002010S	SEMIS - CLP	Acenaphthene	350		ug/kg		U	SOIL	UST	SITE	BOREHOLE 3	1-3	10-JUN-93	

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB002010S	SEMIS - CLP		Acenaphthylene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Anthracene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Benzo(a)anthracene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Benzo(a)pyrene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Benzo(b)fluoranthene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Benzo(g,h,i)perylene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Benzo(k)fluoranthene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Butylbenzylphthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Carbazole	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Chrysene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Di-n-butylphthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Di-n-octylphthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Dibenz(a,h)anthracene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Dibenzofuran	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Diethylphthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Dimethylphthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Fluoranthene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Fluorene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Hexachlorobenzene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Hexachlorobutadiene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Hexachlorocyclopentadiene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Hexachloroethane	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Isophorone	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		N-Nitrosodiphenylamine	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Naphthalene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Nitrobenzene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Pentachlorophenol	880		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Phenanthrene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Phenol	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		Pyrene	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP Y		UNKNOWN	280		ug/kg	R	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP Y		UNKNOWN	150		ug/kg	J	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP Y		UNKNOWN	2100		ug/kg	J	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP Y		UNKNOWN	1700		ug/kg	J	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP Y		UNKNOWN	510		ug/kg	R	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		bis(2-Chloroethyl)ether	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB002010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	350		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,2-Dichloroethane (total)	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		2-Butanone	11		ug/kg	R	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		2-Hexanone	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Acetone	10		ug/kg	UJ	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Benzene	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Bromoform	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Bromomethane	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93

Sample No.	Analysis	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04201C1	INORG	Aluminum	40	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Aluminum	96.5	UG/L	B	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Antimony	12	UG/L	NWUJ	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Antimony	12	UG/L	NWUJ	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Arsenic	1	UG/L	U	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Arsenic	1	UG/L	U	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Barium	6	UG/L	B	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Barium	5	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Beryllium	5	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Beryllium	5	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AN	INORG	Bromide	500	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AN	INORG	Bromide	500	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Cadmium	5	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Cadmium	5	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Calcium	1260	UG/L	B	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Calcium	266	UG/L	B	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AN	INORG	Chloride	100	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AN	INORG	Chloride	160	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Chromium	6	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Chromium	6	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Cobalt	17	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Cobalt	17	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Copper	9	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Copper	9	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AN	INORG	Fluoride	50	UG/L	UJ	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AN	INORG	Fluoride	50	UG/L	UJ	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Iron	876	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Iron	22	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Lead	1	UG/L	U	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Lead	1.5	UG/L	B	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Magnesium	197	UG/L	B	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Magnesium	82	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Manganese	4.5	UG/L	BU	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Manganese	20.4	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Mercury	1	UG/L	U	CV	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Mercury	1	UG/L	U	CV	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Nickel	18	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Nickel	18	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AN	INORG	Nitrate/Nitrite as N	144	UG/L	J	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AN	INORG	Nitrate/Nitrite as N	153	UG/L	J	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AN	INORG	Nitrite	20	UG/L	UJ	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AN	INORG	Nitrite	20	UG/L	UJ	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AN	INORG	Orthophosphate(as P)	10	UG/L	R	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AN	INORG	Orthophosphate(as P)	10	UG/L	R	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Potassium	181	UG/L	U	A	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Potassium	181	UG/L	U	A	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Selenium	1	UG/L	U	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Selenium	1	UG/L	U	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Silver	2	UG/L	UN	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Silver	2	UG/L	UN	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Sodium	395	UG/L	B	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Sodium	137	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AN	INORG	Sulfate	500	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AN	INORG	Sulfate	500	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801C1A	INORG	Thallium	1	UG/L	U	F	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Thallium	1	UG/L	U	F	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201C1	INORG	Vanadium	24	UG/L	U	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801C1A	INORG	Vanadium	24	UG/L	U	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB03801C1A	INORG	Zinc	23.4		UG/L	P	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201C1	INORG	Zinc	36.6		UG/L	P	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AB	RAD	ALPHA	.3	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AB	RAD	ALPHA	1.9	.60	pCi/L		NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AB	RAD	Am-241	.1	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AB	RAD	Am-241	.1	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AB	RAD	BETA	0	.70	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AB	RAD	BETA	0	.70	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801R4	RAD	GAMMA ND			pCi/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201R4	RAD	GAMMA ND			pCi/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AB	RAD	Pu-238	0	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AB	RAD	Pu-238	.1	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AB	RAD	Pu-239/240	0	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AB	RAD	Pu-239/240	0	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AB	RAD	Sr-90	0	.30	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AB	RAD	Sr-90	.1	.40	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AB	RAD	U-234	.1	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AB	RAD	U-234	0	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201AB	RAD	U-235	0	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801AB	RAD	U-235	0	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801AB	RAD	U-238	.1	.10	pCi/L	U	NWATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04201AB	RAD	U-238	0	.10	pCi/L	U	NWATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP	1,2,4-Trichlorobenzene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	1,2,4-Trichlorobenzene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	1,2,4-Trichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	1,2-Dichlorobenzene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	1,2-Dichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	1,2-Dichlorobenzene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP	1,3-Dichlorobenzene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	1,3-Dichlorobenzene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	1,3-Dichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	1,4-Dichlorobenzene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	1,4-Dichlorobenzene	110		ug/kg	J	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	1,4-Dichlorobenzene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP	2,4,5-Trichlorophenol	850		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	2,4,5-Trichlorophenol	50		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	2,4,5-Trichlorophenol	25		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP	2,4,6-Trichlorophenol	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,4,6-Trichlorophenol	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	2,4,6-Trichlorophenol	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP	2,4-Dichlorophenol	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	2,4-Dichlorophenol	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,4-Dichlorophenol	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	2,4-Dimethylphenol	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,4-Dimethylphenol	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	2,4-Dimethylphenol	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP	2,4-Dinitrophenol	50		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	2,4-Dinitrophenol	25		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,4-Dinitrophenol	850		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	2,4-Dinitrotoluene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,4-Dinitrotoluene	160		ug/kg	J	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	2,4-Dinitrotoluene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP	2,6-Dinitrotoluene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	2,6-Dinitrotoluene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2,6-Dinitrotoluene	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	2-Chloronaphthalene	10		ug/L	U	WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	2-Chloronaphthalene	340		ug/kg	U	SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP	2-Chloronaphthalene	20		ug/L	U	WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB038020S	SEMIS - CLP		2-Chlorophenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		2-Chlorophenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		2-Chlorophenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		2-Methylnaphthalene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		2-Methylnaphthalene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		2-Methylnaphthalene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		2-Methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		2-Methylphenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		2-Methylphenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		2-Nitroaniline	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		2-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		2-Nitroaniline	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		2-Nitrophenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		2-Nitrophenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		2-Nitrophenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP Y		2-PENTANONE, 4-HYDROXY-4-MET	1800		ug/kg	R		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038020S	SEMIS - CLP		3,3'-Dichlorobenzidine	340		ug/kg	UJ		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		3,3'-Dichlorobenzidine	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		3,3'-Dichlorobenzidine	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP Y		3-BUTEN-2-ONE, 3-METHYL-	230		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038020S	SEMIS - CLP		3-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		3-Nitroaniline	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		3-Nitroaniline	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		4,6-Dinitro-2-methylphenol	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB042010S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		4-Bromophenyl-phenylether	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		4-Bromophenyl-phenylether	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Bromophenyl-phenylether	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		4-Chloro-3-methylphenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Chloro-3-methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		4-Chloro-3-methylphenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		4-Chloroaniline	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		4-Chloroaniline	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Chloroaniline	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		4-Chlorophenyl-phenylether	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Chlorophenyl-phenylether	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		4-Chlorophenyl-phenylether	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		4-Methylphenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		4-Methylphenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		4-Nitroaniline	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		4-Nitroaniline	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		4-Nitrophenol	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		4-Nitrophenol	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		4-Nitrophenol	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Acenaphthene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Acenaphthene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Acenaphthene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Acenaphthylene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Acenaphthylene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Acenaphthylene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Anthracene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Anthracene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Anthracene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Benzo(a)anthracene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Benzo(a)anthracene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB038020S	SEMIS - CLP		Benzo(a)anthracene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Benzo(a)pyrene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Benzo(a)pyrene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Benzo(a)pyrene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Benzo(b)fluoranthene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Benzo(c)fluoranthene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Benzo(b)fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Benzo(g,h,i)perylene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Benzo(g,h,i)perylene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Benzo(g,h,i)perylene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Benzo(k)fluoranthene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Benzo(k)fluoranthene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Benzo(k)fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Butylbenzylphthalate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Butylbenzylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Butylbenzylphthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Carbazole	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Carbazole	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Carbazole	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Chrysene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Chrysene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Chrysene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Di-n-butylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Di-n-butylphthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Di-n-butylphthalate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Di-n-octylphthalate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Di-n-octylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Di-n-octylphthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Dibenz(a,h)anthracene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Dibenz(a,h)anthracene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Dibenz(a,h)anthracene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Dibenzofuran	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Dibenzofuran	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Dibenzofuran	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Diethylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Diethylphthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Diethylphthalate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Dimethylphthalate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Dimethylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Dimethylphthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Fluoranthene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Fluoranthene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Fluorene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Fluorene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Fluorene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Hexachlorobenzene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Hexachlorobenzene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Hexachlorobenzene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Hexachlorobutadiene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Hexachlorobutadiene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Hexachlorobutadiene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Hexachlorocyclopentadiene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Hexachlorocyclopentadiene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Hexachlorocyclopentadiene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Hexachloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Hexachloroethane	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Hexachloroethane	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93

Sample No.	Analysis	TC	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB038020S	SEMIS - CLP	Y	ISOMER OF C10H14	190		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	Y	ISOMER OF C15H240	11		ug/L	R		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP	Y	ISOMER OF C7H4Cl202	5		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Isophorone	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Isophorone	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Isophorone	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		N-Nitroso-di-n-propylamine	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		N-Nitroso-di-n-propylamine	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		N-Nitrosodiphenylamine	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		N-Nitrosodiphenylamine	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		N-Nitrosodiphenylamine	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Naphthalene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Naphthalene	1900		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Naphthalene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP		Nitrobenzene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Nitrobenzene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Nitrobenzene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	Y	PENTACHLOROBIPHENYL ISOMER	410		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038020S	SEMIS - CLP	Y	PENTACHLOROBIPHENYL ISOMER	330		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038020S	SEMIS - CLP		Pentachlorophenol	850		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Pentachlorophenol	50		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Pentachlorophenol	25		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP		Phenanthrene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Phenanthrene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Phenanthrene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		Phenol	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		Phenol	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Phenol	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		Pyrene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		Pyrene	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		Pyrene	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP	Y	UNKNOWN	11		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB042010S	SEMIS - CLP	Y	UNKNOWN	14		ug/L	R		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038020S	SEMIS - CLP	Y	UNKNOWN	590		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038020S	SEMIS - CLP	Y	UNKNOWN	460		ug/kg	J		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP	Y	UNKNOWN	7		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP	Y	UNKNOWN	5		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038010SA	SEMIS - CLP	Y	UNKNOWN	5		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP	Y	UNKNOWN	290		ug/kg	R		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		bis(2-Chloroethoxy)methane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		bis(2-Chloroethoxy)methane	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		bis(2-Chloroethyl)ether	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		bis(2-Chloroethyl)ether	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		bis(2-Chloroethyl)ether	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB038010SA	SEMIS - CLP		bis(2-Chloroisopropyl)ether	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB042010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	20		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB042010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	1		ug/L	J		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB038010SA	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	2		ug/L	J		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB038020S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	340		ug/kg	U		SOIL	Site Char. Mat	BOREHOLE 1	N/A	09-JUN-93
2TB03801CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04001CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	1,1-Dichloroethene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	1,1-Dichloroethene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,1-Dichloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	2-Butanone	10		ug/L	R		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	2-Butanone	10		ug/L	R		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	2-Butanone	10		ug/L	R		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	2-Hexanone	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	2-Hexanone	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	2-Hexanone	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	4-Methyl-2-Pentanone	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	4-Methyl-2-Pentanone	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	4-Methyl-2-Pentanone	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Acetone	42		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Acetone	12		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Acetone	11		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Benzene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Benzene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Benzene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Bromodichloromethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Bromodichloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Bromodichloromethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Bromoform	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Bromoform	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Bromoform	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Bromomethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Bromomethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Bromomethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Carbon Disulfide	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Carbon Disulfide	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Carbon Disulfide	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Carbon Tetrachloride	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Carbon Tetrachloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Carbon Tetrachloride	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Chlorobenzene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Chlorobenzene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Chlorobenzene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Chloroethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Chloroethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Chloroethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Chloroform	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB04001CV	VOAS - CLP	Chloroform	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Chloroform	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Chloromethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Chloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Chloromethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Ethylbenzene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Ethylbenzene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Ethylbenzene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Methylene Chloride	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Methylene Chloride	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Methylene Chloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Styrene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Styrene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Styrene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Vinyl Acetate	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Vinyl Acetate	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Vinyl Acetate	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB03801CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB04001CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04001CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	QC - TRIP BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB04201CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	BOREHOLE 1	N/A	02-JUN-93
2TB03801CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	QC - RINSATE	BOREHOLE 1	N/A	01-JUN-93
2TB02701C1	INORG	Aluminum	6650		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Antimony	2.6		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Arsenic	5		MG/KG		F	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Barium	155		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Beryllium	1.1		MG/KG	U	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Cadmium	1.3		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Calcium	22100		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Chromium	22.4		MG/KG	*J	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Cobalt	5.1		MG/KG	B	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Copper	15.4		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Iron	13000		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Lead	10.4		MG/KG	S	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Magnesium	4610		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Manganese	217		MG/KG	NJ	P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Mercury	.05		MG/KG	U	CV	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Nickel	17.6		MG/KG		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG	Potassium	1330		MG/KG		A	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB02701C1	INORG		Selenium	.22		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG		Silver	.43		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG		Sodium	123		MG/KG	B		P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG		Thallium	.22		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG		Vanadium	30.4		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701C1	INORG		Zinc	54.1		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		ALPHA	21	5.00	pCi/g				MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		Am-241	.1	.10	pCi/g		UJ		MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		BETA	22	2.00	pCi/g				MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701R4	RAD		GAMMA ND			pCi/g	U			SUBSUR	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		Pu-238	0	.10	pCi/g		UJ		MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		Pu-239/240	0	.10	pCi/g				MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		Sr-90	.2	.30	pCi/g		U		MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		U-234	.8	.10	pCi/g				MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		U-235	0	.10	pCi/g		U		MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02701AB	RAD		U-238	.9	.10	pCi/g				MSOIL	UST SITE	BOREHOLE 1	13-15	01-JUN-93
2TB02702C1	INORG		Aluminum	7760		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Antimony	2.5		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Arsenic	4.1		MG/KG			F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Barium	241		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Beryllium	1.1		MG/KG	U		P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Cadmium	1.5		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Calcium	18900		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Chromium	23.1		MG/KG		*J	P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Cobalt	7.2		MG/KG	B		P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Copper	16.6		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Iron	13100		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Lead	8.6		MG/KG		S	F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Magnesium	5210		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Manganese	258		MG/KG		NJ	P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Mercury	.05		MG/KG	U		CV	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Nickel	18.7		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Potassium	1530		MG/KG			A	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Selenium	1.1		MG/KG		NWUJ	F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Silver	.44		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Sodium	167		MG/KG	B		P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Thallium	.22		MG/KG	U		F	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Vanadium	27.3		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702C1	INORG		Zinc	55.1		MG/KG			P	SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		ALPHA	25	4.00	pCi/g				MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		Am-241	0	.10	pCi/g		UJ		MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		BETA	28	3.00	pCi/g				MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702R4	RAD		GAMMA ND			pCi/g	U			SUBSUR	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		Pu-238	0	.10	pCi/g		UJ		MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		Pu-239/240	0	.10	pCi/g		U		MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		Sr-90	.7	.20	pCi/g		R		MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		U-234	1	.10	pCi/g				MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		U-235	0	.10	pCi/g		U		MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702AB	RAD		U-238	.9	.10	pCi/g				MSOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,1-Dichloroethene	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93
2TB02702CV	VOAS - CLP		2-Butanone	11		ug/Kg	R			SOIL	UST SITE	BOREHOLE 1	15-17	01-JUN-93

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Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00201CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Chloromethane	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00201CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	1-3	10-JUN-93
2TB00501C1	INORG	Aluminum	5880		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Antimony	3.2		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Arsenic	3.5		mg/kg		F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Barium	122		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Beryllium	1.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Bromide	1.15		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Cadmium	1.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Calcium	13000		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Chloride	11.5		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Chromium	17.2		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Cobalt	7.4		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Copper	15		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Fluoride	2.09		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Iron	12300		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Lead	13.7		mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Magnesium	4000		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Manganese	236		mg/kg	N*J	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Mercury	.06		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Nickel	16		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Nitrate	2.2		mg/kg			SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Nitrite	.23		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Orthophosphate(as P)	.88		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Potassium	1110		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Selenium	.4		mg/kg	BNWUJ	F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Silver	.46		mg/kg	UW	F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Sodium	88.7		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AN	INORG	Sulfate	10.8		mg/kg			SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Thallium	.23		mg/kg	UW	F	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Vanadium	28.3		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501C1	INORG	Zinc	53.6		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	ALPHA	14	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	BETA	24	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501R4	RAD	GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	Sr-90	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	U-234	.9	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501AB	RAD	U-238	.9	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501OS	SEMIS - CLP	1,2,4-Trichlorobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB005010S	SEMIS - CLP		1,2-Dichlorobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		1,3-Dichlorobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		1,4-Dichlorobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4,5-Trichlorophenol	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4,6-Trichlorophenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4-Dichlorophenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4-Dimethylphenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4-Dinitrophenol	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,4-Dinitrotoluene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2,6-Dinitrotoluene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Chloronaphthalene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Chlorophenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Methylnaphthalene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Methylphenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Nitroaniline	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		2-Nitrophenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP	Y	2-PENTANONE, 4-HYDROXY-4-MET	2300		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		3,3'-Dichlorobenzidine	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		3-Nitroaniline	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Bromophenyl-phenylether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Chloro-3-methylphenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Chloroaniline	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Chlorophenyl-phenylether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Methylphenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Nitroaniline	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		4-Nitrophenol	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Acenaphthene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Acenaphthylene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Anthracene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Benzo(a)anthracene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Benzo(a)pyrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Benzo(b)fluoranthene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Benzo(g,h,i)perylene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Benzo(k)fluoranthene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Butylbenzylphthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Carbazole	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Chrysene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Di-n-butylphthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Di-n-octylphthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Dibenz(a,h)anthracene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Dibenzofuran	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Diethylphthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Dimethylphthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Fluoranthene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Fluorene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Hexachlorobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Hexachlorobutadiene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Hexachlorocyclopentadiene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Hexachloroethane	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Isophorone	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		N-Nitrosodiphenylamine	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Naphthalene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Nitrobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Pentachlorophenol	960		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	
2TB005010S	SEMIS - CLP		Phenanthrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93	

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB005010S	SEMIS - CLP	Phenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP	Pyrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP Y	UNKNOWN	220		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP Y	UNKNOWN	160		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP Y	UNKNOWN	370		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP Y	UNKNOWN	360		ug/kg	K		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP	bis(2-Chloroethyl)ether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB005010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,1,1-Trichloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,1,2-Trichloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,1-Dichloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,1-Dichloroethene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,2-Dichloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,2-Dichloroethene (total)	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	1,2-Dichloropropane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	2-Butanone	12		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	2-Hexanone	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	4-Methyl-2-Pentanone	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Acetone	18		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Benzene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Bromodichloromethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Bromoform	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Bromomethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Carbon Disulfide	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Carbon Tetrachloride	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Chlorobenzene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Chloroethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Chloroform	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Chloromethane	12		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Dibromochloromethane	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Ethylbenzene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Methylene Chloride	21		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Styrene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Tetrachloroethene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Toluene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Trichloroethene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Vinyl Acetate	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Vinyl Chloride	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	Xylene (total)	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	cis-1,3-Dichloropropene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00501CV	VOAS - CLP	trans-1,3-Dichloropropene	12		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	13-15	11-JUN-93
2TB00601C1	INORG	Aluminum	3900		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Aluminum	4910		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Antimony	3		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Antimony	3		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Arsenic	3.1		mg/kg	S	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Arsenic	3.3		mg/kg		F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Barium	88.3		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Barium	107		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Bromide	1.09		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Bromide	1.08		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00601C1	INORG	Calcium	11200		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Calcium	15100		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Chloride	10.9		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Chloride	10.8		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Chromium	11.3		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Chromium	12.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Cobalt	5.4		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Cobalt	5.7		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Copper	12.7		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Copper	13.4		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Fluoride	1.97		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Fluoride	1.81		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Iron	7930		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Iron	9450		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Lead	9.5		mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Lead	7.3		mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Magnesium	3190		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Magnesium	3760		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Manganese	188		mg/kg	N*UJ	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Manganese	191		mg/kg	N*UJ	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Mercury	.05		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Mercury	.05		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Nickel	15.5		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Nickel	16.9		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Nitrate	3.06		mg/kg			SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Nitrate	2.55		mg/kg			SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Nitrite	.22		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Nitrite	.22		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Orthophosphate(as P)	.62		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Orthophosphate(as P)	.56		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Potassium	636		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Potassium	839		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Selenium	.22		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Selenium	.23		mg/kg	BNWUJ	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Silver	.43		mg/kg	U	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Silver	.43		mg/kg	U	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Sodium	150		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Sodium	223		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AN	INORG	Sulfate	15.2		mg/kg			SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AN	INORG	Sulfate	11.3		mg/kg			SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Thallium	.22		mg/kg	WUJ	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Thallium	.22		mg/kg	UW	F	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Vanadium	23.7		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Vanadium	13		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601C1	INORG	Zinc	54		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602C1	INORG	Zinc	51.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AB	RAD	ALPHA	13	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AB	RAD	ALPHA	26	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AB	RAD	BETA	24	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AB	RAD	BETA	25	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601R4	RAD	Cs-137	.0741	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602R4	RAD	Cs-137	.134	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00602AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB00601AB	RAD	Sr-90	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00602AB	RAD	Sr-90	.1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00601AB	RAD	U-234	.9	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00602AB	RAD	U-234	1	.10	pCi/g			MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00601AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00602AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00601AB	RAD	U-238	.8	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB00602AB	RAD	U-238	1.4	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP Y	2-PENTANONE, 4-HYDROXY-4-MET	790		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP Y	2-PENTENE, 2,3-DIMETHYL-	440		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	
2TB006010S	SEMIS - CLP	Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93	

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Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB006010S	SEMIS - CLP	Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Pentachlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP Y	UNKNOWN	240		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP Y	UNKNOWN	450		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP Y	UNKNOWN	200		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB006010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Acetone	17		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Chloroform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Chloromethane	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Methylene Chloride	18		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00601CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	17-19	11-JUN-93
2TB00701C1	INORG	Aluminum	5660		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Antimony	3		mg/kg		NUJ	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Arsenic	4.2		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Barium	122		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00701AN	INORG	Bromide	1.08		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Calcium	12700		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Chloride	10.8		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Chromium	16.5		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Cobalt	9.6		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Copper	18		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Fluoride	2.16		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Iron	11700		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Lead	10.2		mg/kg		NSR F	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Magnesium	4130		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Manganese	269		mg/kg	N*J	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Mercury	.05		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Nickel	17.5		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Nitrate	.49		mg/kg			SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Nitrite	.22		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Orthophosphate(as P)	.81		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Potassium	883		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Selenium	.22		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Silver	.43		mg/kg	U	F	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Sodium	138		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AN	INORG	Sulfate	34.1		mg/kg			SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Thallium	22		mg/kg	UW	F	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Vanadium	29.6		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701C1	INORG	Zinc	50.3		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	ALPHA	20	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	Am-241	.1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	BETA	27	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701R4	RAD	Cs-137	.162	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	Sr-90	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	U-234	1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701AB	RAD	U-238	1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP Y	2-PENTANONE, 4-HYDROXY-4-MET	2900		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93

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Sample No.	Analysis	T C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB007010S	SEMIS - CLP		4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		4-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	Y	BUTENOL, METHYL-	200		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		2,4-Dichlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	Y	UNKNOWN	260		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP	Y	UNKNOWN PENTENE	220		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB007010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	470		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		Acetone	23		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93

Sample No.	Analysis	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00701CV	VOAS - CLP	Bromodichloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Bromoform	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Bromomethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Carbon Disulfide	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Carbon Tetrachloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Chlorobenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Chloroethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Chloroform	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Chloromethane	11	ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Dibromochloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Ethylbenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Methylene Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Styrene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Tetrachloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Toluene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Trichloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Y UNKNOWN	8	ug/Kg	J		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Y UNKNOWN	7	ug/Kg	J		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Vinyl Acetate	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Vinyl Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	Xylene (total)	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	cis-1,3-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00701CV	VOAS - CLP	trans-1,3-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	21-23	11-JUN-93
2TB00801C1	INORG	Aluminum	4900	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Antimony	3	mg/kg	NWUJ	F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Arsenic	4.6	mg/kg		F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Barium	103	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Beryllium	1.1	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Bromide	1.08	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Cadmium	1.1	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Calcium	2770	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Chloride	10.8	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Chromium	19.1	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Cobalt	7.4	mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Copper	15.2	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Fluoride	1.46	mg/kg	J		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Iron	9600	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Lead	8.9	mg/kg		F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Magnesium	2970	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Manganese	207	mg/kg	N*UJ	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Mercury	.05	mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Nickel	.18	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Nitrate	.81	mg/kg			SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Nitrite	.22	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Orthophosphate(as P)	.47	mg/kg	J		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Potassium	679	mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Selenium	.22	mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Silver	1.1	mg/kg	BU	F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Sodium	98.7	mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AN	INORG	Sulfate	17.8	mg/kg			SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Thallium	.22	mg/kg	UW	F	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Vanadium	26.1	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801C1	INORG	Zinc	42.1	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	ALPHA	24	4.00	pCi/g		MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	Am-241	.1	.10	pCi/g	UJ	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	BETA	28	3.00	pCi/g		MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801R4	RAD	GAMMA ND			pCi/g	U	SUBSUR	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	Pu-238	0	.10	pCi/g	UJ	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB00801AB	RAD	Pu-239/240	0	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	Sr-90	0	.20	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	U-234	1.1	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	U-235	0	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801AB	RAD	U-238	1.2	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP Y	2-PENTANONE, 4-HYDROXY-4-MET	1900		ug/kg	R	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP Y	2-PENTENE, 2,3-DIMETHYL-	170		ug/kg	R	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	4-Nitroaniline	900		ug/kg	U	SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93

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Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB008020S	SEMIS	- CLP	4-Nitroaniline	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	4-Nitrophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	BUTENOL, METHYL-	260		ug/kg	JN		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Benzo(a)pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Benzo(b)fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Benzo(g,h,i)perylene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Benzo(k)fluoranthene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Carbazole	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Chrysene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Di-n-octylphthalate	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Dibenz(a,h)anthracene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	Isophchrone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	Isophchrone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS	- CLP	N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS	- CLP	N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB008010SRE	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		Pentachlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Pentachlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP	Y	UNKNOWN	170		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	Y	UNKNOWN	3200		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	Y	UNKNOWN	220		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP	Y	UNKNOWN ALKANE	200		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008010SRE	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB008020S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,2-Dichloroethane (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,2-Dichloroethane (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Acetone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Acetone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP		Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP		Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93

Sample No.	Analysis	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00801CV	VOAS - CLP	Carbon Tetrachloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Carbon Tetrachloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Chlorobenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Chlorobenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Chloroethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Chloroethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Chloroform	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Chloroform	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Chloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Chloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Dibromochloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Dibromochloromethane	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Ethylbenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Ethylbenzene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Methylene Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Methylene Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Styrene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Styrene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Tetrachloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Tetrachloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Toluene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Toluene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Trichloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Trichloroethene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Vinyl Acetate	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Vinyl Acetate	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Vinyl Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Vinyl Chloride	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	Xylene (total)	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	Xylene (total)	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	cis-1,5-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	cis-1,3-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00801CV	VOAS - CLP	trans-1,3-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00802CV	VOAS - CLP	trans-1,3-Dichloropropene	11	ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	25-27	11-JUN-93
2TB00901C1	INORG	Aluminum	2900	mg/kg			SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Antimony	3	mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Arsenic	4.1	mg/kg		F	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Barium	82.2	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Beryllium	1.1	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Bromide	1.08	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Cadmium	1.1	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Calcium	2360	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Chloride	10.8	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Chromium	8.9	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Cobalt	5.8	mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Copper	11.4	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Fluoride	1.14	mg/kg	J		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Iron	6550	mg/kg		P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Lead	7	mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Magnesium	2110	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Manganese	135	mg/kg	N*UJ	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Mercury	.05	mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Nickel	16.8	mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Nitrate	.56	mg/kg			SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Nitrite	.22	mg/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Orthophosphate(as P)	.23	mg/kg	J		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Potassium	378	mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Selenium	.22	mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB00901C1	INORG	Silver	1		mg/kg	BU	F	SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Sodium	47.6		mg/kg	BU	P	SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AN	INORG	Sulfate	8.53		mg/kg			SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Thallium	.22		mg/kg	WUJ	F	SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Vanadium	20.9		mg/kg		P	SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901C1	INORG	Zinc	23.6		mg/kg	U	P	SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	ALPHA	20	4.00	pCi/g			MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	BETA	24	3.00	pCi/g			MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901R4	RAD	GAMMA ND			pCi/g	U		SUBSUR UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	Sr-90	0	.20	pCi/g	U		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	U-234	.9	.10	pCi/g			MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	U-235	0	.10	pCi/g	U		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901AB	RAD	U-238	1	.10	pCi/g	U		MSOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4,5-Trichlorophenol	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4-Dinitrophenol	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Nitroaniline	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP Y	2-PENTANONE, 4-HYDROXY-4-MET	840		ug/kg	R		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	UJ		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	3-Nitroaniline	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP Y	3-PENTEN-2-ONE, 4-METHYL-	180		ug/kg	R		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Nitroaniline	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	4-Nitrophenol	900		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Benzo(g,h,i)perylene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Benzo(k)fluoranthene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Butylbenzylphthalate	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Carbazole	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Chrysene	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Di-n-butylphthalate	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Di-n-octylphthalate	360		ug/kg	U		SOIL UST SITE	BOREHOLE 3	29-31	11-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB009010S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Fluoranthene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Fluorene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Pentachlorophenol	900		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP	Y	UNKNOWN	310		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB009010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,1-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,1-Dichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,2-Dichloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		1,2-Dichloropropane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		2-Butanone	11		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		2-Hexanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		4-Methyl-2-Pentanone	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Acetone	11		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Benzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Bromodichloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Bromoform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Bromomethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Carbon Disulfide	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Carbon Tetrachloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Chlorobenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Chloroethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Chloroform	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Chloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Dibromochloromethane	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Ethylbenzene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Methylene Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Styrene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Tetrachloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Toluene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Trichloroethene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Vinyl Acetate	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Vinyl Chloride	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		Xylene (total)	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00901CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB00901CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	29-31	11-JUN-93
2TB00101C1	INORG	Aluminum	4360		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Antimony	3.1		mg/kg	NWUJ	F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Arsenic	2.8		mg/kg		F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Barium	106		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Bromide	1.09		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Cadmium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Calcium	2410		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Chloride	10.9		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Chromium	11.9		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Cobalt	7.9		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Copper	14.1		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Fluoride	1.29		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Iron	9430		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Lead	6		mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Magnesium	2710		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Manganese	159		mg/kg	N*UJ	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Mercury	.05		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Nickel	14.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Nitrate	.65		mg/kg			SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Nitrite	.22		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Orthophosphate(as P)	.31		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Potassium	648		mg/kg	BU	A	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Selenium	.22		mg/kg	NUJ	F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Silver	.98		mg/kg	BU	F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Sodium	62.1		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AN	INORG	Sulfate	5.47		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Thallium	.22		mg/kg	WUJ	F	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Vanadium	15.6		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101C1	INORG	Zinc	39.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	ALPHA	26	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	Am-241	.1	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	BETA	28	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101R4	RAD	GAMMA ND			pCi/g	U		SUBSUR	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	Sr-90	0	.20	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	U-234	1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00101AB	RAD	U-238	1.1	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	1,2,4-Trichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	1,2-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	1,3-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	1,4-Dichlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4,5-Trichlorophenol	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4,6-Trichlorophenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4-Dichlorophenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4-Dimethylphenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4-Dinitrophenol	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,4-Dinitrotoluene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2,6-Dinitrotoluene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Chloronaphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Chlorophenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Methylnaphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Methylphenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Nitroaniline	330		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP	2-Nitrophenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB010010S	SEMIS - CLP Y		2-PENTANONE, 4-HYDROXY-4-MET	1300		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		3,3'-Dichlorobenzidine	350		ug/kg	UJ		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		3-Nitroaniline	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP Y		3-PENTEN-2-ONE, 4-METHYL-	240		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4,6-Dinitro-2-methylphenol	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Bromophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Chloro-3-methylphenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Chloroaniline	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Chlorophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Methylphenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Nitroaniline	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		4-Nitrophenol	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Acenaphthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Acenaphthylene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Benzo(a)anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Benzo(a)pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Benzo(b)fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Benzo(g,h,i)perylene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Benzo(k)fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Butylbenzylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Carbazole	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Chrysene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Di-n-butylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Di-n-octylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Dibenz(a,h)anthracene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Dibenzofuran	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Diethylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Dimethylphthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Fluoranthene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Fluorene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Hexachlorobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Hexachlorobutadiene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Hexachlorocyclopentadiene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Hexachloroethane	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Isophorone	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		N-Nitrosodiphenylamine	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Naphthalene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Nitrobenzene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Pentachlorophenol	880		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Phenanthrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Phenol	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		Pyrene	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP Y		UNKNOWN	270		ug/kg	R		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		bis(2-Chloroethyl)ether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		bis(2-Chloroisopropyl)ether	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB010010S	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	350		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP		1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93

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Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB01001CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Acetone	15		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Chloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB01001CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	33-35	11-JUN-93
2TB00301C1	INORG	Aluminum	8510		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Antimony	3.2		mg/kg	NUJ	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Arsenic	4.2		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Barium	212		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Beryllium	1.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Bromide	1.13		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Cadmium	1.4		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Calcium	12600		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Chloride	11.3		mg/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Chromium	15.7		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Cobalt	9.7		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Copper	17.5		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Fluoride	2.64		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Iron	15100		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Lead	13.3		mg/kg	NSR	F	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Magnesium	5290		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Manganese	374		mg/kg	N*J	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Mercury	.06		mg/kg	U	CV	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Nickel	21.2		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Nitrate	3.29		mg/kg			SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Nitrite	.3		mg/kg			SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Orthophosphate(as P)	.69		mg/kg	J		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Potassium	1670		mg/kg	U	A	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Selenium	.33		mg/kg	BNWUJ	F	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Silver	.45		mg/kg	U	F	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Sodium	229		mg/kg	BU	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AN	INORG	Sulfate	14		mg/kg			SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Thallium	.23		mg/kg	U	F	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Vanadium	28.2		mg/kg		P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301C1	INORG	Zinc	66.1		mg/kg	U	P	SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	ALPHA	25	4.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	Am-241	.2	.10	pCi/g	J		MSOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type	Location	Location	Depth Range(ft)	Sample Date
2TB00301AB	RAD	BETA	26	3.00	pCi/g			MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301R4	RAD	Cs-137	324	.04	pCi/g			SUBSUR	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	Sr-90	2	.20	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	U-234	1	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	U-235	0	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301AB	RAD	U-238	1	.10	pCi/g	U		MSOIL	UST	SITE	BOREHOLE 3	5-7	10-JUN-93
2TB003010S	SEMIS - CLP	1,2,4-Trichlorobenzene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	1,2-Dichlorobenzene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	1,3-Dichlorobenzene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	1,4-Dichlorobenzene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4,5-Trichlorophenol	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4,6-Trichlorophenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4-Dichlorophenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4-Dimethylphenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4-Dinitrophenol	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,4-Dinitrotoluene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2,6-Dinitrotoluene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Chloronaphthalene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Chlorophenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Methylnaphthalene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Methylphenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Nitroaniline	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	2-Nitrophenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	3,3'-Dichlorobenzidine	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	3-Nitroaniline	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Bromophenyl-phenylether	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Chloro-3-methylphenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Chloroaniline	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Chlorophenyl-phenylether	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Methylphenol	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Nitroaniline	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	4-Nitrophenol	940		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Acenaphthene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Acenaphthylene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Anthracene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Benzo(a)anthracene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Benzo(a)pyrene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Benzo(b)fluoranthene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Benzo(g,h,i)perylene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Benzo(k)fluoranthene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Butylbenzylphthalate	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Carbazole	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Chrysene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Di-n-butylphthalate	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Di-n-octylphthalate	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Dibenz(a,h)anthracene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Dibenzofuran	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Diethylphthalate	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Dimethylphthalate	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Fluoranthene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Fluorene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Hexachlorobenzene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Hexachlorobutadiene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Hexachlorocyclopentadiene	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Hexachloroethane	380		ug/kg	U		SOIL	UST	SITE	BOREHOLE 3	5-7	11-JUN-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB003010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Isophorone	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	N-Nitroso-di-n-propylamine	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	N-Nitrosodiphenylamine	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Naphthalene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Nitrobenzene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Pentachlorophenol	940		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Phenanthrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Phenol	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	Pyrene	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP Y	UNKNOWN	380		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP Y	UNKNOWN	350		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP Y	UNKNOWN	250		ug/kg	J		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	bis(2-Chloroethyl)ether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB003010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	380		ug/kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	11-JUN-93
2TB00301CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	2-Hexanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Acetone	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Chloromethane	11		ug/Kg	UJ		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Methylene Chloride	22		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Tetrachloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Toluene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Trichloroethene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Vinyl Acetate	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Vinyl Chloride	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	Xylene (total)	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00301CV	VOAS - CLP	trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST SITE	BOREHOLE 3	5-7	10-JUN-93
2TB00401AB	RAD	ALPHA	28	5.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	Am-241	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	BETA	27	3.00	pCi/g			MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401R4	RAD	Co-60	.361	.03	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401R4	RAD	Cs-137	1.65	.13	pCi/g			SUBSUR	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	Pu-238	0	.10	pCi/g	UJ		MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93

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Sample No.	Analysis	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB00401AB	RAD	Sr-90	.3	.20	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	U-234	.9	.10	pCi/g		MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	U-235	0	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB00401AB	RAD	U-238	1.1	.10	pCi/g	U	MSOIL	UST SITE	BOREHOLE 3	9-11	10-JUN-93
2TB03801C1B	INORG	Aluminum	7070		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Aluminum	5180		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Antimony	2.9		mg/kg	NWUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Antimony	2.9		mg/kg	NWUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Arsenic	110		mg/kg		F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Arsenic	111		mg/kg		F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Barium	155		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Barium	130		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Beryllium	1		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Beryllium	1		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Cadmium	99.5		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Cadmium	101		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Calcium	22400		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Calcium	23100		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Chromium	74.4		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Chromium	66.2		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Cobalt	7.9		mg/kg	BU	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Cobalt	8.7		mg/kg	BU	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Copper	16.2		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Copper	14.9		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Iron	13100		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Iron	10200		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Lead	54.9		mg/kg	NR	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Lead	56.2		mg/kg	NR	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Magnesium	6080		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Magnesium	5240		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Manganese	254		mg/kg	N*J	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Manganese	213		mg/kg	N*UJ	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Mercury	5.3		mg/kg		CV SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Mercury	5.2		mg/kg		CV SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Nickel	26.3		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Nickel	22		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Potassium	1280		mg/kg	U	A SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Potassium	933		mg/kg	BU	A SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Selenium	.41		mg/kg	BNWUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Selenium	.2		mg/kg	NUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Silver	.88		mg/kg	BU	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Silver	.63		mg/kg	BU	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Sodium	286		mg/kg	BU	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Sodium	217		mg/kg	BU	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Thallium	.2		mg/kg	WUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Thallium	.2		mg/kg	WUJ	F SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Vanadium	32.5		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Vanadium	15.3		mg/kg		P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03801C1B	INORG	Zinc	73.9		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB03802C1	INORG	Zinc	62.7		mg/kg	U	P SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	1,2,4-Trichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	1,2-Dichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	1,3-Dichlorobenzene	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	1,4-Dichlorobenzene	110		ug/kg	J	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	2,4,5-Trichlorophenol	850		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	2,4,6-Trichlorophenol	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	2,4-Dichlorophenol	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93
2TB038010SB	SEMIS - CLP	2,4-Dimethylphenol	340		ug/kg	U	SOIL	Site Char. Mat. QC		N/A	09-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TB038010SB	SEMIS - CLP		2,4-Dinitrophenol	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2,4-Dinitrotoluene	220		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2,6-Dinitrotoluene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Chloronaphthalene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Chlorophenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Methylnaphthalene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		2-Nitrophenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		2-PENTANONE, 4-HYDROXY-4-MET	4400		ug/kg	R		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		3,3'-Dichlorobenzidine	340		ug/kg	UJ		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		3-BUTEN-2-ONE, 3-METHYL-	350		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		3-HEXENE-2,5-DIONE	180		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		3-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4,6-Dinitro-2-methylphenol	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Bromophenyl-phenylether	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Chloro-3-methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Chloroaniline	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Chlorophenyl-phenylether	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Methylphenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Nitroaniline	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		4-Nitrophenol	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Acenaphthene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Acenaphthylene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Anthracene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Benzo(a)anthracene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Benzo(a)pyrene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Benzo(b)fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Benzo(g,h,i)perylene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Benzo(k)fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Butylbenzylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Carbazole	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Chrysene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Di-n-butylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Di-n-octylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Dibenz(a,h)anthracene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Dibenzofuran	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Diethylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Dimethylphthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Fluoranthene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Fluorene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Hexachlorobenzene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Hexachlorobutadiene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Hexachlorocyclopentadiene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Hexachloroethane	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		ISOMER OF C10H14	180		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Isophorone	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		N-Nitroso-di-n-propylamine	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		N-Nitrosodiphenylamine	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Naphthalene	2200		ug/kg			SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Nitrobenzene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		PENTACHLOROBIPHENYL ISOMER	300		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		PENTACHLOROBIPHENYL ISOMER	450		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		PENTACHLOROBIPHENYL ISOMER	330		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		PENTACHLOROBIPHENYL ISOMER	560		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Pentachlorophenol	850		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Phenanthrene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TB038010SB	SEMIS - CLP		Phenol	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		Pyrene	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		TETRACHLOROBIPHENYL ISOMER	240		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		UNKNOWN	330		ug/kg	R		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		UNKNOWN	170		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		UNKNOWN	740		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP Y		UNKNOWN	830		ug/kg	J		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		bis(2-Chloroethoxy)methane	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		bis(2-Chloroethyl)ether	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		bis(2-Chloroisopropyl)ether	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB038010SB	SEMIS - CLP		bis(2-Ethylhexyl)phthalate	340		ug/kg	U		SOIL	Site Char. Mat	QC	N/A	09-JUN-93
2TB04102CV	VOAS - CLP		1,1,1-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,1,2-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,1-Dichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,2-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,2-Dichloroethene (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		1,2-Dichloropropane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		2-Butanone	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Acetone	16		ug/L	J		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Benzene	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Chlorobenzene	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Chloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Chloroform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Chloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Dibromochloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Ethylbenzene	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Methylene Chloride	7		ug/L	J		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Styrene	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Tetrachloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Toluene	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Trichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Vinyl Acetate	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Vinyl Chloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		Xylene (total)	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		cis-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93
2TB04102CV	VOAS - CLP		trans-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	14-JUN-93

A-94

A.4 Survey of Soil Above the TRA-15 Hot Waste Tanks

The following pages are copies of data from surface contamination surveys at TRA-15.

G Soil Above

BUILDING & ROOM # TRA Hot Waste Tanks DATE 5-18-93 TIME OF SURVEY 2000
Survey of Soil Above the TRA-15 Hot Waste Tanks

N/A Routine

RWPROCEDURE # 937034X Non-Routine (Purpose) Pre-job

TYPE SURVEY: N/A RADIATION X CONTAMINATION

INSTR. USED: MODEL/SERIAL # 2A 801291 MODEL/SERIAL # 2A 800144
MODEL/SERIAL # 2A 800136 MODEL/SERIAL # L-61 800378
L-61 800726 / Asp-1 800881SWIPES TAKEN # N/A LARGE AREA WIPES N/A DIRECT SCAN 61

Legend:

Readings in mR/hr Beta Gamma unless otherwise noted

- ☒ Scan Points
- ☒ Large Area Wipes
- ☒ Swipes All
- ☒ Radiological Barrier (Specify)
- ☒ Contact Reading/30cm Reading
- ☒ Step Off Pac
- ☒ Designates Neutron Readings

Remarks and Comments:

Pre-Job Survey of TRA Contaminated Soil above
Hot Waste tanks.

		YES	NO	N/A
ALL SMEARS	<200 DPM/100CM2 BETA/GAMMA			/
	<1,000 DPM/100CM2 BETA/GAMMA			/
	<20 DPM/100CM2 ALPHA			/
ALL WIPES	<100 CPM ABOVE BACKGROUND BETA/GAMA			/
	<DETECTABLE ALPHA			/
DIRECT SCAN	<100 CPM ABOVE BACKGROUND			/
	<DETECTABLE ALPHA			/

PERFORMED BY: Amir Khan / Phil Smith DATE: 5-18-93
Signature: [Signature]Checked by: Phil Smith / Travis S. Senn
Printed Name: Phil SmithREVIEWED BY: [Signature]

A-96

DATE: 5-19-93

Scaler Information	ID NO.	Count Time	Background Count	Efficiency
<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

CONTAMINATED SWIPES/LARGE AREA WIPE DATA SHEET

SCALER NO.	ID NO.	GROSS COUNTS (cpm)	NET (cpm)	SWIPE dcm/100cm ²	TYPE OF ACTIVITY
<u>N/A</u>					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>
					<u>βγ</u>
					<u>α</u>

RADIATION SURVEY

RADIATION READING

INSTRUMENT TYPE <u>N/A</u>	MAXIMUM @ CONTACT <u>N/A</u> MR/HR
ID NUMBER <u>N/A</u>	MAXIMUM @ 30 CENTIMETERS <u>N/A</u> MR/HR
DOSE RECEIVED <u>N/A</u> MREM	GENERAL BODY FIELD <u>N/A</u> MR/HR

* Denotes Areas above 100cpm or Above detectable α .
 (X) delete α .

location	beta/gamma	alpha
1	<100	no detectable
2	<100	no detectable
3	<100	no detectable
4	<100	no detectable
5	<100	no detectable
6	<100	no detectable
7	110	no detectable
8	<100	no detectable
9	<100	no detectable
10	<100	no detectable
11	200	100
12	<100	no detectable
13	<100	no detectable
14	100	no detectable
15	<100	no detectable
16	<100	no detectable
17	100	100
18	200	no detectable
19	100	100
20	300	no detectable
21	<100	no detectable
22	<100	no detectable
23	<100	no detectable
24	<100	50
25	<100	no detectable
26	300	no detectable
27	<100	no detectable
28	<100	no detectable
29	<100	no detectable
30	<100	no detectable

31	<100	no detectable
32	<100	no detectable
33	100	no detectable
34	<100	no detectable
35	<100	no detectable
36	<100	no detectable
37	<100	no detectable
38	<100	no detectable
39	<100	no detectable
40	<100	no detectable
41	<100	no detectable
42	<100	no detectable
43	<100	no detectable
44	<100	no detectable
45	<100	no detectable
46	<100	no detectable
47	<100	no detectable
48	<100	no detectable
49	<100	no detectable
50	<100	no detectable
51	<100	no detectable
52	<100	no detectable
53	<100	no detectable
54	<100	no detectable
55	<100	no detectable
56	<100	no detectable
57	<100	no detectable
58	<100	no detectable
59	<100	no detectable
60	200	no detectable
61	200	no detectable

A.5 GWSCREEN Output for TRA-15

This section contains the GWSCREEN output for the TRA-15 risk assessment for the groundwater pathway.

TIME OF RUN 09:39:31.7
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
* This output was produced by the model: *
*
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'ACETONE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

GAUSSIAN QUADRATURE SOLUTION
MODEL OPTIONS
IMODE: 4
KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC
IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT
>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY 0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 3.05E+00
THICKNESS OF SOURCE (m) 4.39E+00
PERCOLATION RATE (darcy vel m/y) 5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE 3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.70E-01
BULK DENSITY AT SOURCE (g/cm**3) 1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.60E-03
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.60E-03
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	6.72E+02
MOLECULAR WEIGHT (g/mole)	4.40E+01
SOLUBILITY LIMIT (mg/L)	1.00E+10
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.60E-03
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	3.70E+00
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M. Rood DATE 4/18/94

~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	2.9980E-01
UNSATURATED PORE VELOCITY (m/y)	1.3514E+00
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	1.1254E+00
RETARDATION FACTOR (UNSATURATED)	1.0339E+00
SOLUBILITY LIMITED MASS (mg)	1.5514E+14
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	1.0329E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION	
MAXIMUM CONCENTRATION	1.51E-05 mg/L
AVERAGE CONCENTRATION	1.86E-06 mg/L
PEAK TIME (y):	1.035009E+01
LIMITING SOIL CONCENTRATION (mg/m**3):	3.268E+07
LIMITING SOIL CONCENTRATION (mg/kg):	2.178E+04
LIMITING INVENTORY IN SOIL (mg):	1.334E+09

TIME OF RUN 09:40:05.2
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
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*
* GWScreen *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'BIS(2-ETHYHEXYL) PHTHALATE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS'

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 1.77E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 1.77E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 2.79E+05 |
| MOLECULAR WEIGHT (g/mole)                      | 4.40E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 2.85E-01 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 1.77E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 7.40E-01 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/88

INPUT DATA CHECKED BY: *Phannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

 LEACH RATE CONSTANT (1/y) 3.2959E-04
 UNSATURATED PORE VELOCITY (m/y) 3.3333E-01
 DECAY CONSTANT(S) (1/y) 0.0000E+00
 RETARDATION FACTOR(S) (SATURATED) 3.3730E+02
 RETARDATION FACTOR (UNSATURATED) 1.1310E+02
 SOLUBILITY LIMITED MASS (mg) 6.9626E+06
 SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
 TRANSIT TIME IN UNSAT ZONE (years) 4.5805E+03
 FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
 ~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
 INTEGRATION TIME (years) 30  
 BODY WEIGHT (kg) 7.000E+01  
 AVERAGING TIME (days) 2.555E+04  
 WATER INTAKE RATE (L/d) 2.000E+00  
 EXPOSURE FREQUENCY (days/year) 3.500E+02  
 EXPOSURE DURATION (years) 3.000E+01  
 RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
 CARCINOGENIC RISK CRITERIA 1.000E-06  
 HAZARD QUOTIENT 1.000E+00  
 ~~~~~

>>> RESULTS OF CALCULATIONS

 MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
 MAXIMUM CONCENTRATION 5.29E-06 mg/L
 AVERAGE CONCENTRATION 5.15E-06 mg/L
 PEAK TIME (y): 4.603823E+03
 LIMITING SOIL CONCENTRATION (mg/m**3): 4.407E+07
 LIMITING SOIL CONCENTRATION (mg/kg): 2.938E+04
 LIMITING INVENTORY IN SOIL (mg): 4.010E+10

TIME OF RUN 09:40:06.4
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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* of the groundwater pathway from the leaching *

* of surficial and buried contamination and *

* release of contaminants from percolation ponds *

* 10-11-93 *

* Arthur S. Rood *

* Idaho National Engineering Laboratory *

* EG&G Idaho Inc. *

* Subsurface and Environmental Modeling Unit *

* PO Box 1625 *

* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'BIS(2-ETHYHEXYL)PHTHALATE (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS'

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |



|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 1.77E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 1.77E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 2.79E+05 |
| MOLECULAR WEIGHT (g/mole)                      | 4.40E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 2.85E-01 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 1.77E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 6.07E-03 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 4/18/95

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 3.2959E-04
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01
DECAY CONSTANT(S) (1/y) 0.0000E+00
RETARDATION FACTOR(S) (SATURATED) 3.3730E+02
RETARDATION FACTOR (UNSATURATED) 1.1310E+02
SOLUBILITY LIMITED MASS (mg) 6.9626E+06
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years) 4.5805E+03
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 5.29E-06 mg/L
AVERAGE CONCENTRATION 5.15E-06 mg/L
PEAK TIME (y): 4.603823E+03
LIMITING SOIL CONCENTRATION (mg/m**3): 3.615E+05
LIMITING SOIL CONCENTRATION (mg/kg): 2.410E+02
LIMITING INVENTORY IN SOIL (mg): 3.289E+08

TIME OF RUN 09:39:32.9
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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* *
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'CARBON TETRACHLORIDE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS'

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 3.30E-01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 3.30E-01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 3.21E+02 |
| MOLECULAR WEIGHT (g/mole)                      | 8.50E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 7.57E+02 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 3.30E-01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 2.59E-02 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/18/78

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/84

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 1.3167E-01
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00
DECAY CONSTANT(S) (1/y) 0.0000E+00
RETARDATION FACTOR(S) (SATURATED) 7.2700E+00
RETARDATION FACTOR (UNSATURATED) 2.6946E+00
SOLUBILITY LIMITED MASS (mg) 2.6741E+07
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years) 2.6919E+01
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 3.15E-06 mg/L
AVERAGE CONCENTRATION 9.56E-07 mg/L
PEAK TIME (y): 2.705793E+01
LIMITING SOIL CONCENTRATION (mg/m**3): 2.129E+05
LIMITING SOIL CONCENTRATION (mg/kg): 1.419E+02
LIMITING INVENTORY IN SOIL (mg): 8.695E+06

TIME OF RUN 09:39:34.4
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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* *
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'CARBON TETRACHLORIDE (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITL

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	3.30E-01
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	3.30E-01
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	3.21E+02
MOLECULAR WEIGHT (g/mole)	8.50E+01
SOLUBILITY LIMIT (mg/L)	7.57E+02
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	3.30E-01
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	6.54E-04
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/82

INPUT DATA CHECKED BY: *Shamir M. Kuc* DATE 4/18/84

~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	1.3167E-01
UNSATURATED PORE VELOCITY (m/y)	1.3514E+00
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	7.2700E+00
RETARDATION FACTOR (UNSATURATED)	2.6946E+00
SOLUBILITY LIMITED MASS (mg)	2.6741E+07
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	2.6919E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION	
MAXIMUM CONCENTRATION	3.15E-06 mg/L
AVERAGE CONCENTRATION	9.56E-07 mg/L
PEAK TIME (y):	2.705793E+01
LIMITING SOIL CONCENTRATION (mg/m**3):	5.376E+03
LIMITING SOIL CONCENTRATION (mg/kg):	3.584E+00
LIMITING INVENTORY IN SOIL (mg):	2.196E+05

TIME OF RUN 09:40:07.8
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
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*
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'CHLOROFORM (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 1.41E-01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 1.41E-01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 6.41E+03 |
| MOLECULAR WEIGHT (g/mole)                      | 1.20E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 8.20E+03 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 1.41E-01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 3.70E-01 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/88

INPUT DATA CHECKED BY: *Shannon M. Rood* DATE 4/18/94

#### ~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

##### >>> VALUES CALCULATED IN SOURCE SUBROUTINE

```
*****
LEACH RATE CONSTANT (1/y)                1.7301E-02
UNSATURATED PORE VELOCITY (m/y)          3.3333E-01
DECAY CONSTANT(S) (1/y)                 0.0000E+00
RETARDATION FACTOR(S) (SATURATED)        3.6790E+00
RETARDATION FACTOR (UNSATURATED)        1.8930E+00
SOLUBILITY LIMITED MASS (mg)             3.8163E+09
SOLUBILITY LIMITED ACTIVITY (Ci)         0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)       7.6666E+01
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
*****
```

##### >>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

```
*****
INTEGRATION TIME (years)                 30
BODY WEIGHT (kg)                         7.000E+01
AVERAGING TIME (days)                   2.555E+04
WATER INTAKE RATE (L/d)                  2.000E+00
EXPOSURE FREQUENCY (days/year)          3.500E+02
EXPOSURE DURATION (years)                 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)          4.000E-03
CARCINOGENIC RISK CRITERIA               1.000E-06
HAZARD QUOTIENT                          1.000E+00
*****
```

##### >>> RESULTS OF CALCULATIONS

```
*****
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 6.39E-06 mg/L
AVERAGE CONCENTRATION 5.55E-06 mg/L
PEAK TIME (y): 7.692034E+01
LIMITING SOIL CONCENTRATION (mg/m**3): 4.693E+05
LIMITING SOIL CONCENTRATION (mg/kg): 3.129E+02
LIMITING INVENTORY IN SOIL (mg): 4.270E+08
*****
```

TIME OF RUN 09:40:09.1  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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=====

\*\*\*\*\*  
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\* \*  
\* GWScreen \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:

'CHLOROFORM (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS'

TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	7.32E+00
THICKNESS OF SOURCE (m)	1.13E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	1.41E-01
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	1.41E-01
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	6.41E+03
MOLECULAR WEIGHT (g/mole)	1.20E+02
SOLUBILITY LIMIT (mg/L)	8.20E+03
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	1.41E-01
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	1.39E-02
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/18/87

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 1.7301E-02  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 0.0000E+00  
RETARDATION FACTOR(S) (SATURATED) 3.6790E+00  
RETARDATION FACTOR (UNSATURATED) 1.8930E+00  
SOLUBILITY LIMITED MASS (mg) 3.8163E+09  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 7.6666E+01  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 6.39E-06 mg/L  
AVERAGE CONCENTRATION 5.55E-06 mg/L  
PEAK TIME (y): 7.692034E+01  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 1.763E+04  
LIMITING SOIL CONCENTRATION (mg/kg): 1.175E+01  
LIMITING INVENTORY IN SOIL (mg): 1.604E+07

TIME OF RUN 09:39:35.8  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'DI-N-BUTYLPHTHALATE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' T

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	5.10E+02
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	5.10E+02
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	1.23E+04
MOLECULAR WEIGHT (g/mole)	1.20E+02
SOLUBILITY LIMIT (mg/L)	1.30E+01
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	5.10E+02
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	3.70E+00
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/88

INPUT DATA CHECKED BY: *Harmon M. Rood* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

|                                         |            |
|-----------------------------------------|------------|
| *****                                   |            |
| LEACH RATE CONSTANT (1/y)               | 1.4881E-04 |
| UNSATURATED PORE VELOCITY (m/y)         | 1.3514E+00 |
| DECAY CONSTANT(S) (1/y)                 | 0.0000E+00 |
| RETARDATION FACTOR(S) (SATURATED)       | 9.6910E+03 |
| RETARDATION FACTOR (UNSATURATED)        | 2.6199E+03 |
| SOLUBILITY LIMITED MASS (mg)            | 4.0633E+08 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 0.0000E+00 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 2.6173E+04 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 0.0000E+00 |

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

~~~~~  
>>> RESULTS OF CALCULATIONS

|                                                  |               |
|--------------------------------------------------|---------------|
| *****                                            |               |
| MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION |               |
| MAXIMUM CONCENTRATION                            | 1.35E-07 mg/L |
| AVERAGE CONCENTRATION                            | 1.35E-07 mg/L |
| PEAK TIME (y):                                   | 2.635819E+04  |
| LIMITING SOIL CONCENTRATION (mg/m**3):           | 8.240E+09     |
| LIMITING SOIL CONCENTRATION (mg/kg):             | 5.493E+06     |
| LIMITING INVENTORY IN SOIL (mg):                 | 3.365E+11     |

TIME OF RUN 09:39:37.2  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'DI-N-OCTYLPHTHALATE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' T

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	2.40E+01
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	2.40E+01
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	1.24E+04
MOLECULAR WEIGHT (g/mole)	8.50E+01
SOLUBILITY LIMIT (mg/L)	3.00E+00
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	2.40E+01
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	7.40E-01
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/89

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 3.1316E-03  
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00  
DECAY CONSTANT(S) (1/y) 0.0000E+00  
RETARDATION FACTOR(S) (SATURATED) 4.5700E+02  
RETARDATION FACTOR (UNSATURATED) 1.2424E+02  
SOLUBILITY LIMITED MASS (mg) 4.4558E+06  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 1.2412E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 2.87E-06 mg/L  
AVERAGE CONCENTRATION 2.89E-06 mg/L  
PEAK TIME (y): 1.249923E+03  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 7.774E+07  
LIMITING SOIL CONCENTRATION (mg/kg): 5.182E+04  
LIMITING INVENTORY IN SOIL (mg): 3.175E+09

TIME OF RUN 09:39:38.6  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'ISOPHORONE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

-----

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 6.01E-01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 6.01E-01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 3.76E+04 |
| MOLECULAR WEIGHT (g/mole)                      | 8.50E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 6.01E-01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 7.40E+00 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/18/73

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	8.9575E-02
UNSATURATED PORE VELOCITY (m/y)	1.3514E+00
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	1.2419E+01
RETARDATION FACTOR (UNSATURATED)	4.0862E+00
SOLUBILITY LIMITED MASS (mg)	5.1925E+10
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	4.0821E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

MAXIMUM CONCENTRATION	2.50E-04 mg/L
AVERAGE CONCENTRATION	1.08E-04 mg/L
PEAK TIME (y):	4.105863E+01
LIMITING SOIL CONCENTRATION (mg/m**3):	6.290E+07
LIMITING SOIL CONCENTRATION (mg/kg):	4.193E+04
LIMITING INVENTORY IN SOIL (mg):	2.569E+09

TIME OF RUN 09:39:40.0
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

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* GWSCREEN *
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* A semi-analytical model for the assessment *
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* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'ISOPHORONE (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |



|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 6.01E-01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 6.01E-01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 3.76E+04 |
| MOLECULAR WEIGHT (g/mole)                      | 8.50E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 6.01E-01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 8.95E-02 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/88

INPUT DATA CHECKED BY: *Hannon - fil. Hood* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

 LEACH RATE CONSTANT (1/y) 8.9575E-02
 UNSATURATED PORE VELOCITY (m/y) 1.3514E+00
 DECAY CONSTANT(S) (1/y) 0.0000E+00
 RETARDATION FACTOR(S) (SATURATED) 1.2419E+01
 RETARDATION FACTOR (UNSATURATED) 4.0862E+00
 SOLUBILITY LIMITED MASS (mg) 5.1925E+10
 SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
 TRANSIT TIME IN UNSAT ZONE (years) 4.0821E+01
 FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
 ~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
 INTEGRATION TIME (years) 30  
 BODY WEIGHT (kg) 7.000E+01  
 AVERAGING TIME (days) 2.555E+04  
 WATER INTAKE RATE (L/d) 2.000E+00  
 EXPOSURE FREQUENCY (days/year) 3.500E+02  
 EXPOSURE DURATION (years) 3.000E+01  
 RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
 CARCINOGENIC RISK CRITERIA 1.000E-06  
 HAZARD QUOTIENT 1.000E+00  
 ~~~~~

>>> RESULTS OF CALCULATIONS

 MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
 MAXIMUM CONCENTRATION 2.50E-04 mg/L
 AVERAGE CONCENTRATION 1.08E-04 mg/L
 PEAK TIME (y): 4.105863E+01
 LIMITING SOIL CONCENTRATION (mg/m**3): 7.608E+05
 LIMITING SOIL CONCENTRATION (mg/kg): 5.072E+02
 LIMITING INVENTORY IN SOIL (mg): 3.107E+07

TIME OF RUN 09:39:41.5
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
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*
* GWScreen *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'METHYLENE CHLORIDE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TI

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	2.64E-02
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	2.64E-02
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	4.21E+02
MOLECULAR WEIGHT (g/mole)	8.50E+01
SOLUBILITY LIMIT (mg/L)	2.00E+04
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	2.64E-02
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	2.22E+00
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/18/84

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/1/89

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 2.7806E-01  
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00  
DECAY CONSTANT(S) (1/y) 0.0000E+00  
RETARDATION FACTOR(S) (SATURATED) 1.5016E+00  
RETARDATION FACTOR (UNSATURATED) 1.1356E+00  
SOLUBILITY LIMITED MASS (mg) 3.3454E+08  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 1.1344E+01  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 8.79E-06 mg/L  
AVERAGE CONCENTRATION 1.19E-06 mg/L  
PEAK TIME (y): 1.137302E+01  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 1.926E+07  
LIMITING SOIL CONCENTRATION (mg/kg): 1.284E+04  
LIMITING INVENTORY IN SOIL (mg): 7.864E+08

TIME OF RUN 09:39:42.7  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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=====

\*\*\*\*\*

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\* \*

\* GWSCREEN \*

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\* A semi-analytical model for the assessment \*

\* of the groundwater pathway from the leaching \*

\* of surficial and buried contamination and \*

\* release of contaminants from percolation ponds \*

\* 10-11-93 \*

\* Arthur S. Rood \*

\* Idaho National Engineering Laboratory \*

\* EG&G Idaho Inc. \*

\* Subsurface and Environmental Modeling Unit \*

\* PO Box 1625 \*

\* Idaho Falls, Idaho 83415 \*

\*\*\*\*\*

>>> TITLE OF PROJECT:

'METHYLENE CHLORIDE (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY 0

LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 3.05E+00

WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 3.05E+00

THICKNESS OF SOURCE (m) 4.39E+00

PERCOLATION RATE (darcy vel m/y) 5.00E-01

VOLUMETRIC WATER CONTENT IN SOURCE 3.70E-01

VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.70E-01

BULK DENSITY AT SOURCE (g/cm**3) 1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	2.64E-02
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	2.64E-02
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	4.21E+02
MOLECULAR WEIGHT (g/mole)	8.50E+01
SOLUBILITY LIMIT (mg/L)	2.00E+04
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	2.64E-02
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	1.13E-02
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 9/18/84

INPUT DATA CHECKED BY: *Shannen M. Reed* DATE 4/18/94

----- LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	2.7806E-01
UNSATURATED PORE VELOCITY (m/y)	1.3514E+00
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	1.5016E+00
RETARDATION FACTOR (UNSATURATED)	1.1356E+00
SOLUBILITY LIMITED MASS (mg)	3.3454E+08
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	1.1344E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION	
MAXIMUM CONCENTRATION	8.79E-06 mg/L
AVERAGE CONCENTRATION	1.19E-06 mg/L
PEAK TIME (y):	1.137302E+01
LIMITING SOIL CONCENTRATION (mg/m**3):	9.802E+04
LIMITING SOIL CONCENTRATION (mg/kg):	6.534E+01
LIMITING INVENTORY IN SOIL (mg):	4.003E+06

TIME OF RUN 09:40:17.0
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
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*
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'ARSENIC (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 3.00E+00 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 3.00E+00 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 5.84E+06 |
| MOLECULAR WEIGHT (g/mole)                      | 8.30E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 3.00E+00 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 1.11E-02 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M. Reid DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	1.8437E-03
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	5.8000E+01
RETARDATION FACTOR (UNSATURATED)	2.0000E+01
SOLUBILITY LIMITED MASS (mg)	4.3674E+12
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	8.1000E+02
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

|                                 |           |
|---------------------------------|-----------|
| *****                           |           |
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~  
>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION	
MAXIMUM CONCENTRATION	6.19E-04 mg/L
AVERAGE CONCENTRATION	6.38E-04 mg/L
PEAK TIME (y):	8.140018E+02
LIMITING SOIL CONCENTRATION (mg/m**3):	1.117E+05
LIMITING SOIL CONCENTRATION (mg/kg):	7.444E+01
LIMITING INVENTORY IN SOIL (mg):	1.016E+08

TIME OF RUN 09:40:18.5
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

* * *

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* * *

* GWScreen *

* Version Control Copy, Version 2.02 *

* A semi-analytical model for the assessment *

* of the groundwater pathway from the leaching *

* of surficial and buried contamination and *

* release of contaminants from percolation ponds *

* 10-11-93 *

* Arthur S. Rood *

* Idaho National Engineering Laboratory *

* EG&G Idaho Inc. *

* Subsurface and Environmental Modeling Unit *

* PO Box 1625 *

* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:

'ARSENIC (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

NUMBER OF RADIOACTIVE PROGENY 0

LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.10E+01

WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 7.32E+00

THICKNESS OF SOURCE (m) 1.13E+01

PERCOLATION RATE (darcy vel m/y) 1.00E-01

VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01

VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01

BULK DENSITY AT SOURCE (g/cm\*\*3) 1.50E+00



|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 3.00E+00 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 3.00E+00 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 5.84E+06 |
| MOLECULAR WEIGHT (g/mole)                      | 8.30E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 3.00E+00 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 4.86E-05 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 4/18/87

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/87

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 1.8437E-03
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01
DECAY CONSTANT(S) (1/y) 0.0000E+00
RETARDATION FACTOR(S) (SATURATED) 5.8000E+01
RETARDATION FACTOR (UNSATURATED) 2.0000E+01
SOLUBILITY LIMITED MASS (mg) 4.3674E+12
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years) 8.1000E+02
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 6.19E-04 mg/L
AVERAGE CONCENTRATION 6.38E-04 mg/L
PEAK TIME (y): 8.140018E+02
LIMITING SOIL CONCENTRATION (mg/m**3): 4.889E+02
LIMITING SOIL CONCENTRATION (mg/kg): 3.259E-01
LIMITING INVENTORY IN SOIL (mg): 4.448E+05

TIME OF RUN 09:40:19.9
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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*
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'FLOURIDE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

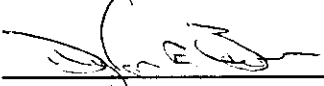
IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 0.00E+00 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 0.00E+00 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 2.21E+06 |
| MOLECULAR WEIGHT (g/mole)                      | 9.00E+00 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 0.00E+00 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 2.22E+00 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 7/18/79

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	2.9499E-02
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	1.0000E+00
RETARDATION FACTOR (UNSATURATED)	1.0000E+00
SOLUBILITY LIMITED MASS (mg)	2.7296E+11
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	4.0500E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

MAXIMUM CONCENTRATION	3.76E-03 mg/L
AVERAGE CONCENTRATION	2.78E-03 mg/L
PEAK TIME (y):	4.056900E+01
LIMITING SOIL CONCENTRATION (mg/m**3):	1.940E+06
LIMITING SOIL CONCENTRATION (mg/kg):	1.293E+03
LIMITING INVENTORY IN SOIL (mg):	1.765E+09

TIME OF RUN 09:40:21.2
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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* *
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'NITRATE (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 7.00E-03 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 7.00E-03 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 2.73E+06 |
| MOLECULAR WEIGHT (g/mole)                      | 5.50E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 7.00E-03 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 5.92E+01 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/88

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 2.8501E-02
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01
DECAY CONSTANT(S) (1/y) 0.0000E+00
RETARDATION FACTOR(S) (SATURATED) 1.1330E+00
RETARDATION FACTOR (UNSATURATED) 1.0443E+00
SOLUBILITY LIMITED MASS (mg) 2.8252E+11
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years) 4.2295E+01
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 4.49E-03 mg/L
AVERAGE CONCENTRATION 3.36E-03 mg/L
PEAK TIME (y): 4.237367E+01
LIMITING SOIL CONCENTRATION (mg/m**3): 5.285E+07
LIMITING SOIL CONCENTRATION (mg/kg): 3.523E+04
LIMITING INVENTORY IN SOIL (mg): 4.809E+10

TIME OF RUN 09:40:22.5
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
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* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'BARIUM (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE
~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

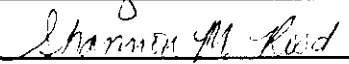
>>> INPUT DATA

\*\*\*\*\*  
NUMBER OF RADIOACTIVE PROGENY 0  
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.10E+01  
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 7.32E+00  
THICKNESS OF SOURCE (m) 1.13E+01  
PERCOLATION RATE (darcy vel m/y) 1.00E-01  
VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01  
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01  
BULK DENSITY AT SOURCE (g/cm\*\*3) 1.50E+00

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 5.00E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 5.00E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 1.69E+08 |
| MOLECULAR WEIGHT (g/mole)                      | 5.60E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 5.00E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 2.59E+00 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY: 

DATE 9/18/88

INPUT DATA CHECKED BY: 

DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	1.1752E-04
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	9.5100E+02
RETARDATION FACTOR (UNSATURATED)	3.1767E+02
SOLUBILITY LIMITED MASS (mg)	6.8514E+13
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	1.2865E+04
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

MAXIMUM CONCENTRATION	1.14E-03 mg/L
AVERAGE CONCENTRATION	1.14E-03 mg/L
PEAK TIME (y):	1.293112E+04
LIMITING SOIL CONCENTRATION (mg/m**3):	4.225E+08
LIMITING SOIL CONCENTRATION (mg/kg):	2.817E+05
LIMITING INVENTORY IN SOIL (mg):	3.845E+11

TIME OF RUN 09:40:23.8
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'BERYLLIUM (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

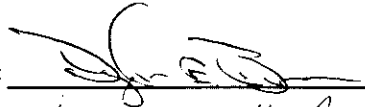
>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |



|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.50E+02 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.50E+02 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 8.46E+05 |
| MOLECULAR WEIGHT (g/mole)                      | 4.00E+00 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.50E+02 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 1.85E-01 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 8/18/94

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	2.3580E-05
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	0.0000E+00
RETARDATION FACTOR(S) (SATURATED)	4.7510E+03
RETARDATION FACTOR (UNSATURATED)	1.5843E+03
SOLUBILITY LIMITED MASS (mg)	3.4148E+14
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	6.4165E+04
FRACTION DECAYED DURING UNSAT TRANSPORT	0.0000E+00

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

MAXIMUM CONCENTRATION	1.15E-06 mg/L
AVERAGE CONCENTRATION	1.15E-06 mg/L
PEAK TIME (y):	6.449330E+04
LIMITING SOIL CONCENTRATION (mg/m**3):	1.500E+08
LIMITING SOIL CONCENTRATION (mg/kg):	1.000E+05
LIMITING INVENTORY IN SOIL (mg):	1.365E+11

TIME OF RUN 09:40:25.2
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
* This output was produced by the model: *
*
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'BERYLLIUM (carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

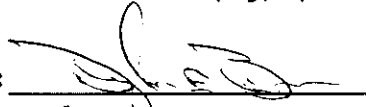
KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*  
NUMBER OF RADIOACTIVE PROGENY 0  
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.10E+01  
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 7.32E+00  
THICKNESS OF SOURCE (m) 1.13E+01  
PERCOLATION RATE (darcy vel m/y) 1.00E-01  
VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01  
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01  
BULK DENSITY AT SOURCE (g/cm\*\*3) 1.50E+00

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.50E+02 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.50E+02 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 8.46E+05 |
| MOLECULAR WEIGHT (g/mole)                      | 4.00E+00 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.50E+02 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 1.98E-05 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 4/15/94

INPUT DATA CHECKED BY: Sharon M. Rood DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 2.3580E-05
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01
DECAY CONSTANT(S) (1/y) 0.0000E+00
RETARDATION FACTOR(S) (SATURATED) 4.7510E+03
RETARDATION FACTOR (UNSATURATED) 1.5843E+03
SOLUBILITY LIMITED MASS (mg) 3.4148E+14
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years) 6.4165E+04
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION
MAXIMUM CONCENTRATION 1.15E-06 mg/L
AVERAGE CONCENTRATION 1.15E-06 mg/L
PEAK TIME (y): 6.449330E+04
LIMITING SOIL CONCENTRATION (mg/m**3): 1.606E+04
LIMITING SOIL CONCENTRATION (mg/kg): 1.070E+01
LIMITING INVENTORY IN SOIL (mg): 1.461E+07

TIME OF RUN 09:40:27.8
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'MERCURY (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 1.00E+02 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 1.00E+02 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 4.09E+04 |
| MOLECULAR WEIGHT (g/mole)                      | 8.00E+01 |
| SOLUBILITY LIMIT (mg/L)                        | 3.00E-02 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 1.00E+38 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 1.00E+02 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING CONTAMINANT GW CONCENTRATION (mg/L)   | 1.11E-02 |
| UNITS OF CONTAMINANT                           | mg       |

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M. Love DATE 4/18/94

# ~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

## >>> VALUES CALCULATED IN SOURCE SUBROUTINE

|                                         |            |
|-----------------------------------------|------------|
| *****                                   |            |
| LEACH RATE CONSTANT (1/y)               | 5.8879E-05 |
| UNSATURATED PORE VELOCITY (m/y)         | 3.3333E-01 |
| DECAY CONSTANT(S) (1/y)                 | 0.0000E+00 |
| RETARDATION FACTOR(S) (SATURATED)       | 1.9010E+03 |
| RETARDATION FACTOR (UNSATURATED)        | 6.3433E+02 |
| SOLUBILITY LIMITED MASS (mg)            | 4.1026E+06 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 0.0000E+00 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 2.5690E+04 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 0.0000E+00 |

## >>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

|                                 |           |
|---------------------------------|-----------|
| *****                           |           |
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

## >>> RESULTS OF CALCULATIONS

|                                                  |               |
|--------------------------------------------------|---------------|
| *****                                            |               |
| MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION |               |
| MAXIMUM CONCENTRATION                            | 1.38E-07 mg/L |
| AVERAGE CONCENTRATION                            | 1.38E-07 mg/L |
| PEAK TIME (y):                                   | 2.582166E+04  |
| LIMITING SOIL CONCENTRATION (mg/m**3):           | 3.607E+06     |
| LIMITING SOIL CONCENTRATION (mg/kg):             | 2.405E+03     |
| LIMITING INVENTORY IN SOIL (mg):                 | 3.282E+09     |

TIME OF RUN 09:40:29.2  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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=====

\*\*\*\*\*  
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\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:

'ZINC (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~  
GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

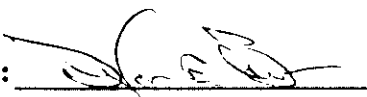
KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY 0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 7.32E+00
THICKNESS OF SOURCE (m) 1.13E+01
PERCOLATION RATE (darcy vel m/y) 1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01
BULK DENSITY AT SOURCE (g/cm**3) 1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	1.60E+01
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	1.60E+01
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	6.92E+07
MOLECULAR WEIGHT (g/mole)	3.00E+01
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	0.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	1.85E+00
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shamin M. Rood DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 3.6418E-04  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 0.0000E+00  
RETARDATION FACTOR(S) (SATURATED) 1.0000E+00  
RETARDATION FACTOR (UNSATURATED) 1.0233E+02  
SOLUBILITY LIMITED MASS (mg) 2.2110E+13  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 4.1445E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 1.46E-03 mg/L  
AVERAGE CONCENTRATION 1.61E-03 mg/L  
PEAK TIME (y): 4.144569E+03  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 8.744E+07  
LIMITING SOIL CONCENTRATION (mg/kg): 5.829E+04  
LIMITING INVENTORY IN SOIL (mg): 7.956E+10

TIME OF RUN 09:40:26.4  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\* GWSCREEN \*

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\* A semi-analytical model for the assessment \*

\* of the groundwater pathway from the leaching \*

\* of surficial and buried contamination and \*

\* release of contaminants from percolation ponds \*

\* 10-11-93 \*

\* Arthur S. Rood \*

\* Idaho National Engineering Laboratory \*

\* EG&G Idaho Inc. \*

\* Subsurface and Environmental Modeling Unit \*

\* PO Box 1625 \*

\* Idaho Falls, Idaho 83415 \*

\*\*\*\*\*

>>> TITLE OF PROJECT:  
'CHROMIUM (non-carcinogenic): TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	7.32E+00
THICKNESS OF SOURCE (m)	1.13E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	1.20E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	1.20E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	2.49E+07
MOLECULAR WEIGHT (g/mole)	5.20E+01
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	1.20E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	3.70E+01
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 8/13/88

INPUT DATA CHECKED BY: *Shannon M. Rood* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 4.2141E-03  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 6.9315E-39  
RETARDATION FACTOR(S) (SATURATED) 2.3800E+01  
RETARDATION FACTOR (UNSATURATED) 8.6000E+00  
SOLUBILITY LIMITED MASS (mg) 1.9107E+12  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 3.4830E+02  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 6.04E-03 mg/L  
AVERAGE CONCENTRATION 6.20E-03 mg/L  
PEAK TIME (y): 3.499421E+02  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 1.632E+08  
LIMITING SOIL CONCENTRATION (mg/kg): 1.088E+05  
LIMITING INVENTORY IN SOIL (mg): 1.485E+11

TIME OF RUN 09:39:44.2  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\* GWSCREEN \*

\* Version Control Copy, Version 2.02 \*

\* A semi-analytical model for the assessment \*

\* of the groundwater pathway from the leaching \*

\* of surficial and buried contamination and \*

\* release of contaminants from percolation ponds \*

\* 10-11-93 \*

\* Arthur S. Rood \*

\* Idaho National Engineering Laboratory \*

\* EG&G Idaho Inc. \*

\* Subsurface and Environmental Modeling Unit \*

\* PO Box 1625 \*

\* Idaho Falls, Idaho 83415 \*

\*\*\*\*\*

>>> TITLE OF PROJECT:

'AM-241: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	1.67E+00
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	3.40E+02
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	3.40E+02
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	7.96E-06
MOLECULAR WEIGHT (g/mole)	2.41E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	4.32E+02
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	3.40E+02
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)	2.00E-13
UNITS OF CONTAMINANT	Ci

INPUT DATA FILE CREATED BY:  DATE 8/18/22

INPUT DATA CHECKED BY: Shannon M. Kead DATE 4/18/24

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 2.32E-03  
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 7.4536E-04  
UNSATURATED PORE VELOCITY (m/y) 4.5135E+00  
DECAY CONSTANT(S) (1/y) 1.6045E-03  
RETARDATION FACTOR(S) (SATURATED) 6.4610E+03  
RETARDATION FACTOR (UNSATURATED) 1.7469E+03  
SOLUBILITY LIMITED MASS (mg) 2.0842E+13  
SOLUBILITY LIMITED ACTIVITY (Ci) 7.1627E+10  
TRANSIT TIME IN UNSAT ZONE (years) 5.2251E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 9.9977E-01  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION  
LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 2.00E-13 Ci/L  
MAXIMUM GW CONCENTRATION FOR MBR #1: 7.87E-20 Ci/L  
AVERAGE GW CONCENTRATION FOR MBR #1: 7.87E-20 Ci/L  
PEAK TIME (y): 5.325716E+03  
LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 4.956E-01  
~~~~~

TIME OF RUN 09:40:12.9
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

ACKNOWLEDGEMENT OF GOVERNMENT SPONSORSHIP AND
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=====

* This output was produced by the model: *
* *
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:

'EU-154: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 1.00E-02 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 1.00E-02 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 7.78E-04 |
| MOLECULAR WEIGHT (g/mole)                      | 1.54E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 8.80E+00 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 1.00E-02 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 1.60E-11 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/94

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 2.95E-03

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	2.8094E-02
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	7.8767E-02
RETARDATION FACTOR(S) (SATURATED)	1.1900E+00
RETARDATION FACTOR (UNSATURATED)	1.0633E+00
SOLUBILITY LIMITED MASS (mg)	2.8661E+11
SOLUBILITY LIMITED ACTIVITY (Ci)	7.5669E+10
TRANSIT TIME IN UNSAT ZONE (years)	4.3065E+01
FRACTION DECAYED DURING UNSAT TRANSPORT	9.6636E-01

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTE. ATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~  
>>> RESULTS OF CALCULATIONS

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 1.60E-11 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 4.22E-14 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 1.41E-14 Ci/L

PEAK TIME (y): 4.314711E+01

LIMITING SOIL CONCENTRATION (Ci/m**3): 9.673E-04

LIMITING SOIL CONCENTRATION (Ci/kg):	6.449E-07
LIMITING INVENTORY IN SOIL (Ci):	8.801E-01
LIMITING INVENTORY IN SOIL (mg):	3.334E+00
SPECIFIC ACTIVITY (Ci/g):	2.640E+02
EXECUTION TIME (seconds)	0

TIME OF RUN 09:39:45.5
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

ACKNOWLEDGEMENT OF GOVERNMENT SPONSORSHIP AND
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=====

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*
* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'PU-238: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.20E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.20E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 5.51E-06 |
| MOLECULAR WEIGHT (g/mole)                      | 2.38E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 8.77E+01 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.20E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 2.18E-13 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/12/94

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 3.22E-04
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 3.4131E-03
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00
DECAY CONSTANT(S) (1/y) 7.9000E-03
RETARDATION FACTOR(S) (SATURATED) 4.1900E+02
RETARDATION FACTOR (UNSATURATED) 1.1397E+02
SOLUBILITY LIMITED MASS (mg) 1.3628E+12
SOLUBILITY LIMITED ACTIVITY (Ci) 2.3349E+10
TRANSIT TIME IN UNSAT ZONE (years) 1.1386E+03
FRACTION DECAYED DURING UNSAT TRANSPORT 9.9988E-01
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION
LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 2.18E-13 Ci/L
MAXIMUM GW CONCENTRATION FOR MBR #1: 1.62E-19 Ci/L
AVERAGE GW CONCENTRATION FOR MBR #1: 1.55E-19 Ci/L
PEAK TIME (y): 1.146597E+03
LIMITING SOIL CONCENTRATION (Ci/m**3): 1.901E-01

LIMITING SOIL CONCENTRATION (Ci/kg):	1.267E-04
LIMITING INVENTORY IN SOIL (Ci):	7.763E+00
LIMITING INVENTORY IN SOIL (mg):	4.531E+02
SPECIFIC ACTIVITY (Ci/g):	1.713E+01
EXECUTION TIME (seconds)	0

TIME OF RUN 09:39:46.8
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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* GWSCREEN *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
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* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:

'PU-239: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.20E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.20E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 6.12E-06 |
| MOLECULAR WEIGHT (g/mole)                      | 2.39E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 2.41E+04 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.20E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 2.09E-13 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY:  DATE 4/15/78

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 9.86E-02

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	3.4131E-03
UNSATURATED PORE VELOCITY (m/y)	1.3514E+00
DECAY CONSTANT(S) (1/y)	2.8737E-05
RETARDATION FACTOR(S) (SATURATED)	4.1900E+02
RETARDATION FACTOR (UNSATURATED)	1.1397E+02
SOLUBILITY LIMITED MASS (mg)	1.3628E+12
SOLUBILITY LIMITED ACTIVITY (Ci)	8.4581E+07
TRANSIT TIME IN UNSAT ZONE (years)	1.1386E+03
FRACTION DECAYED DURING UNSAT TRANSPORT	3.2191E-02

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*

|                                 |           |
|---------------------------------|-----------|
| INTEGRATION TIME (years)        | 30        |
| BODY WEIGHT (kg)                | 7.000E+01 |
| AVERAGING TIME (days)           | 2.555E+04 |
| WATER INTAKE RATE (L/d)         | 2.000E+00 |
| EXPOSURE FREQUENCY (days/year)  | 3.500E+02 |
| EXPOSURE DURATION (years)       | 3.000E+01 |
| RADIOLOGICAL DOSE LIMIT (rem/y) | 4.000E-03 |
| CARCINOGENIC RISK CRITERIA      | 1.000E-06 |
| HAZARD QUOTIENT                 | 1.000E+00 |

~~~~~  
>>> RESULTS OF CALCULATIONS

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 2.09E-13 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 1.49E-15 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 1.52E-15 Ci/L

PEAK TIME (y): 1.146597E+03

LIMITING SOIL CONCENTRATION (Ci/m**3): 2.061E-05

LIMITING SOIL CONCENTRATION (Ci/kg):	1.374E-08
LIMITING INVENTORY IN SOIL (Ci):	8.417E-04
LIMITING INVENTORY IN SOIL (mg):	1.356E+01
SPECIFIC ACTIVITY (Ci/g):	6.207E-02
EXECUTION TIME (seconds)	0

TIME OF RUN 09:39:48.2
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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*
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*
* GWScreen *
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* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'PU-240: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.20E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.20E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 6.12E-06 |
| MOLECULAR WEIGHT (g/mole)                      | 2.40E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 6.57E+03 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.20E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 2.09E-13 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/78

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 2.70E-02
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y) 3.4131E-03
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00
DECAY CONSTANT(S) (1/y) 1.0550E-04
RETARDATION FACTOR(S) (SATURATED) 4.1900E+02
RETARDATION FACTOR (UNSATURATED) 1.1397E+02
SOLUBILITY LIMITED MASS (mg) 1.3628E+12
SOLUBILITY LIMITED ACTIVITY (Ci) 3.0922E+08
TRANSIT TIME IN UNSAT ZONE (years) 1.1386E+03
FRACTION DECAYED DURING UNSAT TRANSPORT 1.1319E-01
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
~~~~~

>>> RESULTS OF CALCULATIONS

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 2.09E-13 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 1.37E-15 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 1.39E-15 Ci/L

PEAK TIME (y): 1.146597E+03

LIMITING SOIL CONCENTRATION (Ci/m**3): 2.252E-05

LIMITING SOIL CONCENTRATION (Ci/kg):	1.501E-08
LIMITING INVENTORY IN SOIL (Ci):	9.197E-04
LIMITING INVENTORY IN SOIL (mg):	4.053E+00
SPECIFIC ACTIVITY (Ci/g):	2.269E-01
EXECUTION TIME (seconds)	0

TIME OF RUN 09:39:48.2
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

*
* This output was produced by the model: *
*
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:

'PU-240: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 3.05E+00 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 3.05E+00 |
| THICKNESS OF SOURCE (m)                      | 4.39E+00 |
| PERCOLATION RATE (darcy vel m/y)             | 5.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.70E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.70E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |



|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 2.20E+01 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 2.20E+01 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 6.12E-06 |
| MOLECULAR WEIGHT (g/mole)                      | 2.40E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 6.57E+03 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 2.20E+01 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 1.52E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 2.09E-13 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/94

INPUT DATA CHECKED BY: *Sharon M. Good* DATE 4/18/94

-----  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 2.70E-02  
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 3.4131E-03  
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00  
DECAY CONSTANT(S) (1/y) 1.0550E-04  
RETARDATION FACTOR(S) (SATURATED) 4.1900E+02  
RETARDATION FACTOR (UNSATURATED) 1.1397E+02  
SOLUBILITY LIMITED MASS (mg) 1.3628E+12  
SOLUBILITY LIMITED ACTIVITY (Ci) 3.0922E+08  
TRANSIT TIME IN UNSAT ZONE (years) 1.1386E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 1.1319E-01  
-----

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

\*\*\*\*\*  
INTEGRATION TIME (years) 30  
BODY WEIGHT (kg) 7.000E+01  
AVERAGING TIME (days) 2.555E+04  
WATER INTAKE RATE (L/d) 2.000E+00  
EXPOSURE FREQUENCY (days/year) 3.500E+02  
EXPOSURE DURATION (years) 3.000E+01  
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03  
CARCINOGENIC RISK CRITERIA 1.000E-06  
HAZARD QUOTIENT 1.000E+00  
-----

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 2.09E-13 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 1.37E-15 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 1.39E-15 Ci/L

PEAK TIME (y): 1.146597E+03

LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 2.252E-05

|                                      |           |
|--------------------------------------|-----------|
| LIMITING SOIL CONCENTRATION (Ci/kg): | 1.501E-08 |
| LIMITING INVENTORY IN SOIL (Ci):     | 9.197E-04 |
| LIMITING INVENTORY IN SOIL (mg):     | 4.053E+00 |
| SPECIFIC ACTIVITY (Ci/g):            | 2.269E-01 |
| EXECUTION TIME (seconds)             | 0         |

TIME OF RUN 09:39:49.5  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

ACKNOWLEDGEMENT OF GOVERNMENT SPONSORSHIP AND  
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=====

\*\*\*\*\*  
\*  
\* This output was produced by the model: \*  
\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'SR-90: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	3.05E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	3.05E+00
THICKNESS OF SOURCE (m)	4.39E+00
PERCOLATION RATE (darcy vel m/y)	5.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.70E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.70E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	2.40E+01
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	2.40E+01
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	2.88E-02
MOLECULAR WEIGHT (g/mole)	9.00E+01
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	2.86E+01
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	2.40E+01
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	1.52E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)	1.33E-12
UNITS OF CONTAMINANT	Ci

INPUT DATA FILE CREATED BY:  DATE 8/18/98

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/99

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 2.07E-01  
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 3.1316E-03  
UNSATURATED PORE VELOCITY (m/y) 1.3514E+00  
DECAY CONSTANT(S) (1/y) 2.4236E-02  
RETARDATION FACTOR(S) (SATURATED) 4.5700E+02  
RETARDATION FACTOR (UNSATURATED) 1.2424E+02  
SOLUBILITY LIMITED MASS (mg) 1.4853E+12  
SOLUBILITY LIMITED ACTIVITY (Ci) 2.0646E+11  
TRANSIT TIME IN UNSAT ZONE (years) 1.2412E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 1.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 1.33E-12 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 4.66E-25 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 3.99E-25 Ci/L

PEAK TIME (y): 1.249127E+03

LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 2.353E+09

LIMITING SOIL CONCENTRATION (Ci/kg): 1.569E+06  
LIMITING INVENTORY IN SOIL (Ci): 9.608E+10  
LIMITING INVENTORY IN SOIL (mg): 6.912E+11  
SPECIFIC ACTIVITY (Ci/g): 1.390E+02  
NOTE: THE LIMITING SOIL CONCENTRATION OF 1.569E+03 Ci/g  
EXCEEDS THE SPECIFIC ACTIVITY OF THE NUCLIDE.  
EXECUTION TIME (seconds) 0

TIME OF RUN 09:40:14.2  
DATE OF RUN 04/15/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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=====

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\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:

'U-234: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	7.32E+00
THICKNESS OF SOURCE (m)	1.13E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	2.10E-03
MOLECULAR WEIGHT (g/mole)	2.34E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	2.45E+05
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)	3.00E-12
UNITS OF CONTAMINANT	Ci

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Sharon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 3.36E+02  
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 9.5157E-04  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 2.8292E-06  
RETARDATION FACTOR(S) (SATURATED) 1.1500E+02  
RETARDATION FACTOR (UNSATURATED) 3.9000E+01  
SOLUBILITY LIMITED MASS (mg) 8.4618E+12  
SOLUBILITY LIMITED ACTIVITY (Ci) 5.2810E+07  
TRANSIT TIME IN UNSAT ZONE (years) 1.5795E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 4.4587E-03  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION  
LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 3.00E-12 Ci/L  
MAXIMUM GW CONCENTRATION FOR MBR #1: 1.14E-13 Ci/L  
AVERAGE GW CONCENTRATION FOR MBR #1: 1.13E-13 Ci/L  
PEAK TIME (y): 1.587435E+03  
LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 6.114E-05

|                                      |           |
|--------------------------------------|-----------|
| LIMITING SOIL CONCENTRATION (Ci/kg): | 4.076E-08 |
| LIMITING INVENTORY IN SOIL (Ci):     | 5.563E-02 |
| LIMITING INVENTORY IN SOIL (mg):     | 8.914E+03 |
| SPECIFIC ACTIVITY (Ci/g):            | 6.241E-03 |
| EXECUTION TIME (seconds)             | 0         |



TIME OF RUN 08:22:25.6  
DATE OF RUN 01/07/94  
INPUT FILE NAME: u234.2b  
OUTPUT FILE NAME: u234.o2b

=====

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\*\*\*\*\*  
\*  
\* This output was produced by the model: \*  
\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'U-234: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 6

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	7.32E+00
THICKNESS OF SOURCE (m)	1.13E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	3.38E+02
MOLECULAR WEIGHT (g/mole)	2.34E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	2.45E+05
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	5.70E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
NON-CARCINOGENIC REFERENCE DOSE RfD (mg/kg/d)	3.00E-03
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 8/18/87

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

LEACH RATE CONSTANT (1/y)	9.5157E-04
UNSATURATED PORE VELOCITY (m/y)	3.3333E-01
DECAY CONSTANT(S) (1/y)	2.8292E-06
RETARDATION FACTOR(S) (SATURATED)	1.1500E+02
RETARDATION FACTOR (UNSATURATED)	3.9000E+01
SOLUBILITY LIMITED MASS (mg)	8.4618E+12
SOLUBILITY LIMITED ACTIVITY (Ci)	0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)	1.5795E+03
FRACTION DECAYED DURING UNSAT TRANSPORT	4.4587E-03

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

>>> RESULTS OF CALCULATIONS

LIMITING GROUNDWATER CONCENTRATION (mg/L):	2.56E-01
MAXIMUM GROUNDWATER CONCENTRATION (mg/L):	1.55E-08
AVERAGE GROUNDWATER CONCENTRATION (mg/L):	1.56E-08
HAZARD QUOTIENT FOR INPUT MASS:	6.09E-08
PEAK TIME (y):	1.586154E+03
LIMITING SOIL CONCENTRATION (mg/m**3):	6.103E+06
LIMITING SOIL CONCENTRATION (mg/kg):	4.069E+03

TIME OF RUN 09:40:15.6
DATE OF RUN 04/15/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

ACKNOWLEDGEMENT OF GOVERNMENT SPONSORSHIP AND
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=====

*
* This output was produced by the model: *
*
* GWSCREEN *
* Version Control Copy, Version 2.02 *
* A semi-analytical model for the assessment *
* of the groundwater pathway from the leaching *
* of surficial and buried contamination and *
* release of contaminants from percolation ponds *
* 10-11-93 *
* Arthur S. Rood *
* Idaho National Engineering Laboratory *
* EG&G Idaho Inc. *
* Subsurface and Environmental Modeling Unit *
* PO Box 1625 *
* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:

'U-238: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

\*\*\*\*\*

|                                              |          |
|----------------------------------------------|----------|
| NUMBER OF RADIOACTIVE PROGENY                | 0        |
| LENGTH OF SOURCE PARALLEL TO GW FLOW (m)     | 1.10E+01 |
| WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) | 7.32E+00 |
| THICKNESS OF SOURCE (m)                      | 1.13E+01 |
| PERCOLATION RATE (darcy vel m/y)             | 1.00E-01 |
| VOLUMETRIC WATER CONTENT IN SOURCE           | 3.00E-01 |
| VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE | 3.00E-01 |
| BULK DENSITY AT SOURCE (g/cm**3)             | 1.50E+00 |

|                                                |          |
|------------------------------------------------|----------|
| SORPTION COEFFICIENT AT SOURCE (ml/g)          | 6.00E+00 |
| BULK DENSITY IN UNSAT ZONE (g/cm**3)           | 1.90E+00 |
| UNSATURATED ZONE THICKNESS (m)                 | 1.35E+01 |
| SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)      | 6.00E+00 |
| OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1) | 0.00E+00 |
| INITIAL MASS OR ACTIVITY (mg or Ci)            | 1.73E-03 |
| MOLECULAR WEIGHT (g/mole)                      | 2.38E+02 |
| SOLUBILITY LIMIT (mg/L)                        | 1.00E+06 |
| HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)    | 4.68E+09 |
| BULK DENSITY OF AQUIFER (g/cm**3)              | 1.90E+00 |
| POROSITY OF AQUIFER                            | 1.00E-01 |
| SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)      | 6.00E+00 |
| DISPERSIVITY X DIRECTION (m)                   | 9.00E+00 |
| DISPERSIVITY Y DIRECTION (m)                   | 4.00E+00 |
| PORE VELOCITY (m/y)                            | 4.78E+02 |
| WELL SCREEN THICKNESS (m)                      | 1.50E+01 |
| DISTANCE TO RECEPTOR ALONG X AXIS (m)          | 5.50E+00 |
| DISTANCE TO RECEPTOR ALONG Y AXIS (m)          | 0.00E+00 |
| LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)  | 1.71E-12 |
| UNITS OF CONTAMINANT                           | Ci       |

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/94

INPUT DATA CHECKED BY: *Harmon M. Reed* DATE 4/18/94

#### ~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 5.39E+06

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*

|                                         |            |
|-----------------------------------------|------------|
| LEACH RATE CONSTANT (1/y)               | 9.5157E-04 |
| UNSATURATED PORE VELOCITY (m/y)         | 3.3333E-01 |
| DECAY CONSTANT(S) (1/y)                 | 1.4811E-10 |
| RETARDATION FACTOR(S) (SATURATED)       | 1.1500E+02 |
| RETARDATION FACTOR (UNSATURATED)        | 3.9000E+01 |
| SOLUBILITY LIMITED MASS (mg)            | 8.4618E+12 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 2.7181E+03 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 1.5795E+03 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 2.3394E-07 |

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

~~~~~  
>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 1.71E-12 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 9.46E-14 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 9.37E-14 Ci/L

PEAK TIME (y): 1.587435E+03

LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 3.470E-05

|                                      |           |
|--------------------------------------|-----------|
| LIMITING SOIL CONCENTRATION (Ci/kg): | 2.313E-08 |
| LIMITING INVENTORY IN SOIL (Ci):     | 3.157E-02 |
| LIMITING INVENTORY IN SOIL (mg):     | 9.827E+07 |
| SPECIFIC ACTIVITY (Ci/g):            | 3.212E-07 |
| EXECUTION TIME (seconds)             | 0         |

TIME OF RUN 08:22:41.6  
DATE OF RUN 01/07/94  
INPUT FILE NAME: u238.2b  
OUTPUT FILE NAME: u238.o2b

=====

ACKNOWLEDGEMENT OF GOVERNMENT SPONSORSHIP AND  
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\*\*\*\*\*  
\*  
\* This output was produced by the model: \*  
\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'U-238: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 6

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.10E+01
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	7.32E+00
THICKNESS OF SOURCE (m)	1.13E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	5.15E+06
MOLECULAR WEIGHT (g/mole)	2.38E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	4.68E+09
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	5.70E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	5.50E+00
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
NON-CARCINOGENIC REFERENCE DOSE RfD (mg/kg/d)	3.00E-03
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 7/18/84

INPUT DATA CHECKED BY: Shannon M. Root DATE 9/18/94

~~~~~ LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

```
*****
LEACH RATE CONSTANT (1/y)          9.5157E-04
UNSATURATED PORE VELOCITY (m/y)    3.3333E-01
DECAY CONSTANT(S) (1/y)           1.4811E-10
RETARDATION FACTOR(S) (SATURATED)  1.1500E+02
RETARDATION FACTOR (UNSATURATED)   3.9000E+01
SOLUBILITY LIMITED MASS (mg)        8.4618E+12
SOLUBILITY LIMITED ACTIVITY (Ci)    0.0000E+00
TRANSIT TIME IN UNSAT ZONE (years)  1.5795E+03
FRACTION DECAYED DURING UNSAT TRANSPORT 2.3394E-07
*****
```

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

```
*****
INTEGRATION TIME (years)           30
BODY WEIGHT (kg)                    7.000E+01
AVERAGING TIME (days)              2.555E+04
WATER INTAKE RATE (L/d)             2.000E+00
EXPOSURE FREQUENCY (days/year)     3.500E+02
EXPOSURE DURATION (years)           3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)     4.000E-03
CARCINOGENIC RISK CRITERIA          1.000E-06
HAZARD QUOTIENT                     1.000E+00
*****
```

>>> RESULTS OF CALCULATIONS

```
*****
LIMITING GROUNDWATER CONCENTRATION (mg/L): 2.56E-01
MAXIMUM GROUNDWATER CONCENTRATION (mg/L): 2.36E-04
AVERAGE GROUNDWATER CONCENTRATION (mg/L): 2.38E-04
HAZARD QUOTIENT FOR INPUT MASS:          9.32E-04
PEAK TIME (y):                          1.586154E+03
LIMITING SOIL CONCENTRATION (mg/m**3):    6.076E+06
LIMITING SOIL CONCENTRATION (mg/kg):       4.051E+03
*****
```

Appendix B

TRA-16 Supporting Information

CONTENTS

B.1	Quality Assurance/Quality Control for TRA-16	B-5
B.1.1	TRA-16 Field Precision and Accuracy	B-5
B.1.2	TRA-16 Laboratory Precision and Accuracy	B-5
B.1.3	TRA-16 Completeness	B-7
B.1.4	TRA-16 Representativeness	B-7
B.1.5	TRA-16 Comparability	B-7
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B.2	ERIS Data Tables for TRA-16	B-9
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Appendix B

TRA-16 Supporting Information

B.1 Quality Assurance/Quality Control for TRA-16

The draft *Quality Assurance Project Plan for Waste Area Groups 1, 2, 4, 5, 6, and 10* (EG&G Idaho, 1993) was the controlling quality document guiding this investigation. Minimum requirements for precision, accuracy, completeness, representativeness, and comparability are defined in the QAPjP. Known planned deviations from this document are defined in Section 3 of the SAP (Jessmore, 1993). The following summarizes the results of the quality assurance and quality control sampling done during the Track 2 investigation at TRA-16.

B.1.1 TRA-16 Field Precision and Accuracy

Duplicate samples for TRA-16 were collected from the south end of the tank excavation bottom and analyzed for radionuclides, CLP metals, VOCs, and SVOCs. One duplicate for the two samples collected exceeds the minimum criteria for field duplicates in the QAPjP. The RPDs were calculated for all duplicate sample sets with positive hits for an analyte in both samples reported. The results are shown in Table B-1. The RPD ranged from zero for U-234 to 77% for sodium. For the two radionuclides, the RPDs were high; as stated earlier, this is not unexpected since soil can have different activities of radionuclides in different areas of the same sample due to the presence of particles. The average RPD for all 19 pairs was 30%, and the variance was calculated to be 6%. This measure of precision is good since the EPA has reported that soil sample precision is commonly between 30 and 40% (EPA, 1992).

Accuracy is a measure of how close to the true value a sample result is. In the field, accuracy can be affected by sampling preservation and handling, field contamination, and the sample matrix. The first three of these parameters can be qualitatively assessed by evaluating the results of field, equipment, and trip blanks. During the sampling at TRA-16, a field blank (2TE027), equipment blank (2TE028), and trip blank (2TE026) were collected. All blanks (except the trip blank) were analyzed for all the analytes of interest in the investigation. The only organic compounds detected in the blanks were chloroform and methylene chloride at 1 or 2 µg/L. Aluminum, calcium, iron, lead, and zinc were detected in the field blank at 152 µg/L, 39.8 µg/L, 209 µg/L, 2.7 µg/L, and 14.6 µg/L, respectively. Iron and selenium were detected in the equipment blank at 56.9 µg/L and 1.1 µg/L, respectively. These concentrations are consistent with background levels.

B.1.2 TRA-16 Laboratory Precision and Accuracy

For TRA-16, duplicates and MS/MSDs were taken from sample 2TE00101. The RPD results of all laboratory duplicate and MS/MSD analyses were within the required limits. However, the RPD for calcium (39.2%), lead (43.9%), and mercury (200%) were out of control.

Table B-1. TRA-16 RPD results (in mg/Kg or pCi/g).

Analyte	Sample concentration		Relative percent difference (%)
	2TE00201	2TE00202	
Uranium-234	0.65	0.99	42
Uranium-238	0.69	1.26	58
Aluminum	1500	1920	25
Arsenic	1.3	2.3	56
Barium	52.8	49.2	7
Calcium	13700	9060	41
Chromium	2.2	3.0	31
Cobalt	2.9	3.1	7
Iron	4840	5520	13
Lead	2.9	6.3	74
Magnesium	1930	1970	3
Manganese	141	145	3
Nickel	3.9	3.2	20
Potassium	362	443	20
Sodium	68	154	77
Vanadium	10.2	9.0	13
Zinc	25.9	22.2	15

Laboratory analytical accuracy is evaluated through the use of laboratory control samples (LCS) and matrix spikes (MS). For VOCs, the trip and field blanks can also be used to evaluate laboratory accuracy. The results of field and trip blank analyses are reported in the discussion of field accuracy. All LCS and MS results were reported to be within limits defined by the EPA and SMO with the following exceptions:

- Out-of-control values for antimony (66.1%), arsenic (72.3%), and mercury (-6%) were reported. As a result, mercury results in two of the soil samples were flagged "R".
- LCS results for uranium-234 were questionable (81%), and the LCS results for uranium-238 were out of control (75%).

Based on the review of the validated data reports, the overall laboratory precision and accuracy goals for this project have been met, since the required laboratory QA/QC analyses and calculations were performed with few results reported outside the defined limits.

B.1.3 TRA-16 Completeness

Completeness measures the quantity of useable data that have been collected during an investigation. The QAPjP requires that a completeness goal of 90% and 100% be achieved for noncritical and critical samples, respectively. For TRA-16, all samples collected from the excavation were considered critical (with the exception of the field duplicates). Completeness for the project was calculated to be 97% (see Table B-2).

Completeness for TRA-16 was affected only by the rejection of eight data points during the data validation process. These were for mercury, 2-butanone, 4-methyl-2-pentanone, and 2-hexanone. The three organic compounds were rejected due to initial and continuing calibration problems. Not meeting the completeness goal of 100% was not considered to affect the quality of the data collected, since none of the contaminants were detected, nor do any of the other data suggest that they may be present at the site.

B.1.4 TRA-16 Representativeness

Representativeness is a qualitative parameter that expresses the degree to which sample data accurately and precisely represent a characteristic of interest being measured. This parameter is best evaluated by comparing the number of samples collected with the number necessary to be representative and confirming that the sample locations were properly selected. The characteristic of interest for TRA-16 was the presence or absence of contamination in the tank excavation. The locations of samples collected were as planned in the SAP and intended to be biased toward detecting contamination if present. As discussed in the completeness section (Section B.1.3), the number of samples collected was also as planned in the SAP. The collected data are believed to be representative of conditions at the site (i.e., no contamination is present).

B.1.5 TRA-16 Comparability

Comparability is a qualitative measure of how equivalent data sets used in the risk assessment are. For the TRA-16 tank excavation, all sampling was performed in 1 day and all samples were analyzed together, so comparability is not a concern.

B.1.6 References

- EG&G Idaho, 1993, *Quality Assurance Project Plan for Waste Area Groups 1, 2, 4, 5, 6, and 10*, EGG-WM-10076, January.
- EPA, 1992, *Guidance for Data Useability in Risk Assessment (Part A) Final*, 9285.7-09A, April.
- Jessmore, J. J., 1993, *Track 2 Sampling and Analysis Plan for the Characterization of Waste Area Group 2, Operable Units 2-05 and 2-07*, EGG-ER-10652, Rev. 1, May.

Table B-2. TRA-16 completeness results.

Analysis type	Planned number of samples by analyses	Actual number of samples by analyses
Alpha	2	2
Metals	2	2
Volatiles	2	2
Semivolatile	2	2
Gamma	2	2
Total	10	10
Planned number of data points		288
Actual number of data points		280
Percent completeness		97

B.2 ERIS Data Tables for TRA-16

The following tables contain the validated data resulting from Track 2 sampling at TRA-16.

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE00101C1	INORG	Aluminum	3240		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Antimony	2.3		mg/kg		F	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Arsenic	5.2		mg/kg		NJ	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Barium	57.6		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Beryllium	.89		mg/kg		B	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Cadmium	1.4		mg/kg		*	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Calcium	11300		mg/kg		*J	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Chromium	9.3		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Cobalt	4.7		mg/kg		B	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Copper	7.8		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101WR	INORG	Ignitability	0		mg/kg			SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Iron	7120		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Lead	5		mg/kg		NS*J	F	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Magnesium	3000		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Manganese	117		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Mercury	.24		mg/kg		N*J	CV	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Nickel	12.8		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Potassium	719		mg/kg		B	A	SOIL	UST SITE	9	19-AUG-93
2TE00101WR	INORG	Reactive Cyanide	.03		mg/kg		R	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101WR	INORG	Reactive Sulfide	104		mg/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Selenium	.21		mg/kg		U	F	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Silver	.42		mg/kg		U	F	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Sodium	186		mg/kg		BU	P	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Thallium	.21		mg/kg		B	F	SOIL	UST SITE	9	19-AUG-93
2TE00101C1	INORG	Vanadium	21.7		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101C1	INORG	Zinc	32.6		mg/kg		P	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101WR	INORG	pH	9.4		mg/kg			SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	ALPHA	13	4.00	pCi/g			MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	Am-241	.1	.10	pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	BETA	29	3.00	pCi/g			MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101R4	RAD	GAMMA ND			pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	Pu-238	0	.10	pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	Pu-239/240	0	.10	pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	Sr-90	0	.20	pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	U-234	.73	.05	pCi/g			MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	U-235	-.04	.02	pCi/g		U	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101AB	RAD	U-238	.87	.05	pCi/g		J	MSOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	1,2,4-Trichlorobenzene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	1,2-Dichlorobenzene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	1,3-Dichlorobenzene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	1,4-Dichlorobenzene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4,5-Trichlorophenol	870		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4,6-Trichlorophenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4-Dichlorophenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4-Dimethylphenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4-Dinitrophenol	870		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,4-Dinitrotoluene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2,6-Dinitrotoluene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Chloronaphthalene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Chlorophenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Methylnaphthalene	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Methylphenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Nitroaniline	870		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	2-Nitrophenol	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	3,3'-Dichlorobenzidine	350		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	3-HEXENE-2,5-DIONE	180		ug/kg		R	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	3-Nitroaniline	870		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	870		ug/kg		U	SOIL	UST SITE	N END OF TANK	9	19-AUG-93

Sample No.	Analysis	T I C Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE001010S	SEMIS - CLP	4-Bromophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Chloro-3-methylphenol	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Chloroaniline	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Chlorophenyl-phenylether	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Methylphenol	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Nitroaniline	870		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	4-Nitrophenol	870		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Acenaphthene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Acenaphthylene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Anthracene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Benzo(a)anthracene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Benzo(a)pyrene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Benzo(b)fluoranthene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Benzo(g,h,i)perylene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Benzo(k)fluoranthene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Butylbenzylphthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Carbazole	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Chrysene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Di-n-butylphthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Di-n-octylphthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Dibenz(a,h)anthracene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Dibenzofuran	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Diethylphthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Dimethylphthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	ETHENE, 1,1'-OXYBIS-	180		ug/kg	JN		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Fluoranthene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Fluorene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Hexachlorobenzene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Hexachlorobutadiene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Hexachlorocyclopentadiene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Hexachloroethane	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	ISOMER OF C5H8O	160		ug/kg	J		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Indeno(1,2,3-cd)pyrene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Isophorone	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	N-Nitroso-di-n-propylamine	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	N-Nitrosodiphenylamine	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Naphthalene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Nitrobenzene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Pentachlorophenol	870		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Phenanthrene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Phenol	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	Pyrene	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	UNKNOWN	240		ug/kg	J		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	UNKNOWN	740		ug/kg	J		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	UNKNOWN	2200		ug/kg	R		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP Y	UNKNOWN	570		ug/kg	J		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	bis(2-Chloroethoxy)methane	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	bis(2-Chloroethyl)ether	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE001010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	350		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,1-Dichloroethane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,1-Dichloroethene	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,2-Dichloroethane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,2-Dichloroethene (total)	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	1,2-Dichloropropane	10		ug/kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE00101CV	VOAS - CLP	2-Butanone	10		ug/Kg	R		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	2-Hexanone	10		ug/Kg	R		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	4-Methyl-2-Pentanone	10		ug/Kg	R		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Acetone	22		ug/Kg	BUJ		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Benzene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Bromodichloromethane	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Bromoform	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Bromomethane	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Carbon Disulfide	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Carbon Tetrachloride	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Chlorobenzene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Chloroethane	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Chloroform	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Chloromethane	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Dibromochloromethane	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Ethylbenzene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Methylene Chloride	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Styrene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Tetrachloroethene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Toluene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Trichloroethene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Vinyl Chloride	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	Xylene (total)	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE00101CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/Kg	U		SOIL	UST SITE	N END OF TANK	9	19-AUG-93
2TE02701C1	INORG	Aluminum	152		ug/L	B	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Aluminum	90		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Antimony	11		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Antimony	11		ug/L	U	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Arsenic	2		ug/L	U	F	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Arsenic	2		ug/L	U	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Barium	2		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Barium	2		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Beryllium	4		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Beryllium	4		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Cadmium	5		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Cadmium	5		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Calcium	39.8		ug/L	B	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Calcium	31		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Chromium	6		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Chromium	6		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Cobalt	7		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Cobalt	7		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Copper	8		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Copper	8		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701WR	INORG	Ignitability	0		ug/L			WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801WR	INORG	Ignitability	0		ug/L			WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Iron	209		ug/L	*J	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Iron	56.9		ug/L	B*J	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Lead	2.7		ug/L	B	F	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Lead	1		ug/L	U	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Magnesium	65		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Magnesium	65		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Manganese	3		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Manganese	3		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Mercury	.1		ug/L	U	CV	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Mercury	.1		ug/L	U	CV	WATER	RINSATE	QC	N/A	17-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE02701C1	INORG	Nickel	11		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Nickel	11		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Potassium	121		ug/L	U	A	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Potassium	121		ug/L	U	A	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701WR	INORG	Reactive Cyanide	5		ug/L	UJ		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801WR	INORG	Reactive Cyanide	5		ug/L	UJ		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02801WR	INORG	Reactive Sulfide	20000		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701WR	INORG	Reactive Sulfide	20000		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02701C1	INORG	Selenium	1		ug/L	UNW	F	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Selenium	1.1		ug/L	BNJ	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Silver	2		ug/L	U	F	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Silver	2		ug/L	U	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Sodium	140		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Sodium	140		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Thallium	1		ug/L	U	F	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Thallium	1		ug/L	U	F	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Vanadium	12		ug/L	U	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Vanadium	12		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701C1	INORG	Zinc	14.6		ug/L	B	P	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801C1	INORG	Zinc	6		ug/L	U	P	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701WR	INORG	pH	7.78		ug/L			WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801WR	INORG	pH	6.85		ug/L			WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	ALPHA	.4	.30	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	ALPHA	.9	.30	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	Am-241	.1	.10	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	Am-241	.0	.10	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	BETA	.7	.80	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	BETA	.3	.80	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701R4	RAD	GAMMA ND			pCi/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801R4	RAD	GAMMA ND			pCi/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	Pu-233	0	.10	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	Pu-238	0	.10	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	Pu-239/240	0	.10	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	Pu-239/240	0	.10	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	Sr-90	.1	.40	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	Sr-90	.2	.40	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	U-234	.2	.20	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	U-234	0	.10	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	U-235	0	.10	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	U-235	0	.10	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE02701AB	RAD	U-238	.3	.20	pCi/L	U		NWATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801AB	RAD	U-238	0	.20	pCi/L	U		NWATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	1,2,4-Trichlorobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	1,2,4-Trichlorobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	1,2-Dichlorobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	1,2-Dichlorobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	1,3-Dichlorobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	1,3-Dichlorobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	1,4-Dichlorobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	1,4-Dichlorobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,4,5-Trichlorophenol	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4,5-Trichlorophenol	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,4,6-Trichlorophenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4,6-Trichlorophenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,4-Dichlorophenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4-Dichlorophenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,4-Dimethylphenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4-Dimethylphenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE027010H	SEMIS - CLP	2,4-Dinitrophenol	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4-Dinitrophenol	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,4-Dinitrotoluene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,4-Dinitrotoluene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2,6-Dinitrotoluene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2,6-Dinitrotoluene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Chloronaphthalene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Chloronaphthalene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Chlorophenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Chlorophenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Methylnaphthalene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Methylnaphthalene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Methylphenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Methylphenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Nitroaniline	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Nitroaniline	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	2-Nitrophenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	2-Nitrophenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	3,3'-Dichlorobenzidine	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	3,3'-Dichlorobenzidine	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	3-Nitroaniline	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	3-Nitroaniline	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4,6-Dinitro-2-methylphenol	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Bromophenyl-phenylether	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Bromophenyl-phenylether	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Chloro-3-methylphenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Chloro-3-methylphenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Chloroaniline	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Chloroaniline	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Chlorophenyl-phenylether	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Chlorophenyl-phenylether	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Methylphenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Methylphenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Nitroaniline	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Nitroaniline	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	4-Nitrophenol	25		ug/L	UJ		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	4-Nitrophenol	25		ug/L	UJ		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Acenaphthene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Acenaphthene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Acenaphthylene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Acenaphthylene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Anthracene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Anthracene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Benzo(a)anthracene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Benzo(a)anthracene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Benzo(a)pyrene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Benzo(a)pyrene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Benzo(b)fluoranthene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Benzo(b)fluoranthene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Benzo(g,h,i)perylene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Benzo(g,h,i)perylene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Benzo(k)fluoranthene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Benzo(k)fluoranthene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Butylbenzylphthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Butylbenzylphthalate	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	Carbazole	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	Carbazole	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE027010H	SEMIS - CLP		Chrysene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Chrysene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Di-n-butylphthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Di-n-butylphthalate	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Di-n-octylphthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Di-n-octylphthalate	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Dibenz(a,h)anthracene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Dibenz(a,h)anthracene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Dibenzofuran	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Dibenzofuran	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Diethylphthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Diethylphthalate	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Dimethylphthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Dimethylphthalate	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Fluoranthene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Fluoranthene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Fluorene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Fluorene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP Y		HEPTANOIC ACID	11		ug/L	JN		WATER	RINSATE	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP Y		HEXADECANOIC ACID	5		ug/L	JN		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Hexachlorobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Hexachlorobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Hexachlorobutadiene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Hexachlorobutadiene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Hexachlorocyclopentadiene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Hexachlorocyclopentadiene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Hexachloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Hexachloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP Y		ISOMER OF C15H24O	7		ug/L	R		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP Y		ISOMER OF C15H24O	12		ug/L	R		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Isophorone	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Isophorone	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		N-Nitroso-di-n-propylamine	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		N-Nitrosodiphenylamine	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		N-Nitrosodiphenylamine	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Naphthalene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Naphthalene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Nitrobenzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Nitrobenzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Pentachlorophenol	25		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Pentachlorophenol	25		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Phenanthrene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Phenanthrene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Phenol	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Phenol	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		Pyrene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		Pyrene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP Y		UNKNOWN	4		ug/L	J		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP Y		UNKNOWN	5		ug/L	J		WATER	RINSATE	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP Y		UNKNOWN HYDROCARBON	29		ug/L	J		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		bis(2-Chloroethoxy)methane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		bis(2-Chloroethyl)ether	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP		bis(2-Chloroethyl)ether	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP		bis(2-Chloroisopropyl)ether	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TE028010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE027010H	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE028010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	110		ug/L	B		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,1,1-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,1,2-Trichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,1-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,2-Dichloroethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,2-Dichloroethane (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	1,2-Dichloropropane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	2-Butanone	10		ug/L	R		WATER	TRIP BLANK	QC	N/A	17-AUG-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE02602CV	VOAS - CLP		2-Butanone	10		ug/L	R		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		2-Butanone	10		ug/L	R		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		2-Butanone	10		ug/L	R		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		2-Butanone	10		ug/L	R		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		2-Butanone	10		ug/L	R		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		2-Hexanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		4-Methyl-2-Pentanone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Acetone	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Acetone	10		ug/L	UJ		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Acetone	13		ug/L	BUJ		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Acetone	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Acetone	10		ug/L	UJ		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Acetone	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Benzene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Benzene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Benzene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Benzene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Benzene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Benzene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Bromodichloromethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Bromoform	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Bromoform	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Bromomethane	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Y	COLUMN BLEED	8		ug/L	R		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Carbon Disulfide	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP		Carbon Tetrachloride	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Flags	Matrix	Type Location	Location	Depth Range (ft)	Sample Date
2TE02701CM	VOAS - CLP	Carbon Tetrachloride	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Carbon Tetrachloride	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Chlorobenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Chloroethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Chloroform	1		ug/L	J	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Chloroform	1		ug/L	J	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Chloroform	2		ug/L	J	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Chloroform	1		ug/L	J	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Chloroform	1		ug/L	J	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Chloroform	2		ug/L	J	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Chloromethane	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Dibromochloromethane	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Ethylbenzene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Methylene Chloride	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Methylene Chloride	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Methylene Chloride	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Methylene Chloride	1		ug/L	J	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Methylene Chloride	1		ug/L	J	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Methylene Chloride	1		ug/L	J	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Styrene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Styrene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Styrene	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Styrene	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Styrene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Styrene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Tetrachloroethene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Toluene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Toluene	10		ug/L	U	WATER	TRIP BLANK	QC	N/A	17-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE02603CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Toluene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Toluene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Trichloroethene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Vinyl Chloride	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	Xylene (total)	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	cis-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02601CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02604CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02603CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE02801CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	RINSATE	QC	N/A	17-AUG-93
2TE02701CM	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	FIELD BLANK	QC	N/A	17-AUG-93
2TE02602CV	VOAS - CLP	trans-1,3-Dichloropropene	10		ug/L	U		WATER	TRIP BLANK	QC	N/A	17-AUG-93
2TE00201C1	INORG	Aluminum	1500		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Aluminum	1920		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Antimony	2.3		mg/kg	NUJ	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Antimony	2.3		mg/kg	NUJ	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Arsenic	1.3		mg/kg	BNJ	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Arsenic	2.3		mg/kg	NJ	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Barium	52.8		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Barium	49.2		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Beryllium	.85		mg/kg	U	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Beryllium	.85		mg/kg	U	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Cadmium	1.1		mg/kg	U*	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Cadmium	1.1		mg/kg	U*	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Calcium	13700		mg/kg	*J	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Calcium	9060		mg/kg	*J	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Chromium	2.2		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Chromium	3		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Cobalt	2.9		mg/kg	B	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Cobalt	3.1		mg/kg	B	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Copper	1.7		mg/kg	U	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Copper	1.7		mg/kg	B	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201WR	INORG	Ignitability	0		mg/kg			SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202WR	INORG	Ignitability	0		mg/kg			SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Iron	4840		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Iron	5520		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93

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Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE00201C1	INORG	Lead	2.9		mg/kg	N*J	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Lead	6.3		mg/kg	NS*J	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Magnesium	1930		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Magnesium	1970		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Manganese	141		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Manganese	145		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Mercury	.02		mg/kg	R	CV	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Mercury	.02		mg/kg	R	CV	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Nickel	3.9		mg/kg	B	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Nickel	3.2		mg/kg	B	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Potassium	362		mg/kg	B	A	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Potassium	443		mg/kg	B	A	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201WR	INORG	Reactive Cyanide	.03		mg/kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202WR	INORG	Reactive Cyanide	.03		mg/kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201WR	INORG	Reactive Sulfide	106		mg/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202WR	INORG	Reactive Sulfide	106		mg/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Selenium	.21		mg/kg	U	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Selenium	.21		mg/kg	UW	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Silver	.43		mg/kg	U	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Silver	.43		mg/kg	U	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Sodium	68		mg/kg	BU	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Sodium	154		mg/kg	BU	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Thallium	.21		mg/kg	U	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Thallium	.21		mg/kg	U	F	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Vanadium	10.2		mg/kg	BU	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Vanadium	9		mg/kg	BU	P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201C1	INORG	Zinc	25.9		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202C1	INORG	Zinc	22.2		mg/kg		P	SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201WR	INORG	pH	9.16		mg/kg			SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202WR	INORG	pH	9.13		mg/kg			SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	ALPHA	15	4.00	pCi/g			MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	ALPHA	23	4.00	pCi/g			MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	Am-241	.1	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	Am-241	.1	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	BETA	27	2.00	pCi/g			MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	BETA	29	3.00	pCi/g			MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201R4	RAD	GAMMA ND			pCi/g	U		SUR	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202R4	RAD	GAMMA ND			pCi/g	U		SUR	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	Pu-238	0	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	Pu-238	0	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	Pu-239/240	0	.10	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	Sr-90	.1	.20	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	Sr-90	0	.20	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	U-234	.65	.05	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	U-234	.99	.06	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	U-235	-.05	.02	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	U-235	0	.02	pCi/g	U		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201AB	RAD	U-238	.69	.05	pCi/g	J		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202AB	RAD	U-238	1.26	.06	pCi/g	J		MSOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	1,2,4-Trichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	1,2-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	1,3-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	1,4-Dichlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE002010S	SEMIS - CLP	2,4,5-Trichlorophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4,5-Trichlorophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4,6-Trichlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4-Dichlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4-Dimethylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,4-Dinitrophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4-Dinitrophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,4-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2,6-Dinitrotoluene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Chloronaphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Chlorophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Methylnaphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	2-Nitrophenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	3,3'-Dichlorobenzidine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	3-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	3-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4,6-Dinitro-2-methylphenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Bromophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Chloro-3-methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Chloroaniline	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Chlorophenyl-phenylether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Methylphenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Nitroaniline	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	4-Nitrophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	4-Nitrophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Acenaphthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Acenaphthylene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Benzo(a)anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Benzo(a)pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	Benzo(b)fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93

Sample No.	Analysis	T I C	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE002010S	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Benzo(g,h,i)perylene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Benzo(k)fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Butylbenzylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Carbazole	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Carbazole	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Chrysene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Chrysene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Di-n-butylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Di-n-octylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Dibenz(a,h)anthracene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Dibenzofuran	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Diethylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Dimethylphthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Fluoranthene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Fluorene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Fluorene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Hexachlorobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Hexachlorobutadiene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Hexachlorocyclopentadiene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Hexachloroethane	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Indeno(1,2,3-cd)pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Isophorone	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		N-Nitroso-di-n-propylamine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		N-Nitrosodiphenylamine	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Naphthalene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Nitrobenzene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Pentachlorophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Pentachlorophenol	890		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Phenanthrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Phenol	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		Pyrene	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		bis(2-Chloroethoxy)methane	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP		bis(2-Chloroethyl)ether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93

Sample No.	Analysis	Compound	Concentration	Rad Uncert.	Units	Q	Flags	Matrix	Type Location	Location	Depth Range(ft)	Sample Date
2TE002010S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	bis(2-Chloroisopropyl)ether	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002010S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE002020S	SEMIS - CLP	bis(2-Ethylhexyl)phthalate	360		ug/kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,1,1-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,1,2,2-Tetrachloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,1,2-Trichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,1-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,1-Dichloroethene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,2-Dichloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,2-Dichloroethene (total)	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	1,2-Dichloropropane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	2-Butanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	2-Hexanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	2-Hexanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	4-Methyl-2-Pentanone	11		ug/Kg	R		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Acetone	32		ug/Kg	BUJ		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Acetone	27		ug/Kg	BUJ		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Benzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Bromodichloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Bromoform	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Bromomethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Carbon Disulfide	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Carbon Tetrachloride	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Chlorobenzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Chloroethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Chloroform	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Chloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Chloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Dibromochloromethane	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Ethylbenzene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Methylene Chloride	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00201CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93
2TE00202CV	VOAS - CLP	Styrene	11		ug/Kg	U		SOIL	UST SITE	S END OF TANK	9	19-AUG-93

Sample No.	Analysis	C	Compound	Concentration	Rad		Q	Flags	Matrix	Type		Location	Location	Depth Range (ft)	Sample Date
					Uncert.	Units									
2TE00201CV	VOAS - CLP		Tetrachloroethene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		Tetrachloroethene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		Toluene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		Toluene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		Trichloroethene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		Trichloroethene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		Vinyl Chloride	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		Vinyl Chloride	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		Xylene (total)	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		Xylene (total)	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		cis-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00201CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93
2TE00202CV	VOAS - CLP		trans-1,3-Dichloropropene	11		ug/Kg	U		SOIL	UST	SITE	S END OF TANK		9	19-AUG-93

B.3 GWSCREEN Output for TRA-16

This section contains the GWSCREEN output for the TRA-16 risk assessment for the groundwater pathway.

TIME OF RUN 09:13:21.8
DATE OF RUN 04/18/94
INPUT FILE NAME: gwscreen.par
OUTPUT FILE NAME: gwscreen.out

=====

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=====

* This output was produced by the model: *

* GWSCREEN *

* Version Control Copy, Version 2.02 *

* A semi-analytical model for the assessment *

* of the groundwater pathway from the leaching *

* of surficial and buried contamination and *

* release of contaminants from percolation ponds *

* 10-11-93 *

* Arthur S. Rood *

* Idaho National Engineering Laboratory *

* EG&G Idaho Inc. *

* Subsurface and Environmental Modeling Unit *

* PO Box 1625 *

* Idaho Falls, Idaho 83415 *

>>> TITLE OF PROJECT:
'ARSENIC (non-carcinogenic): TRA-16 STORAGE TANK' TITLE

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	1.10E+00
THICKNESS OF SOURCE (m)	1.00E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	3.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	3.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	1.54E+05
MOLECULAR WEIGHT (g/mole)	7.50E+01
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	3.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	1.11E-02
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*

|                                         |            |
|-----------------------------------------|------------|
| LEACH RATE CONSTANT (1/y)               | 2.0833E-03 |
| UNSATURATED PORE VELOCITY (m/y)         | 3.3333E-01 |
| DECAY CONSTANT(S) (1/y)                 | 0.0000E+00 |
| RETARDATION FACTOR(S) (SATURATED)       | 5.8000E+01 |
| RETARDATION FACTOR (UNSATURATED)        | 2.0000E+01 |
| SOLUBILITY LIMITED MASS (mg)            | 9.5040E+10 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 0.0000E+00 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 8.1000E+02 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 0.0000E+00 |

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	1.100E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

|                                        |               |
|----------------------------------------|---------------|
| MAXIMUM CONCENTRATION                  | 2.93E-05 mg/L |
| AVERAGE CONCENTRATION                  | 3.44E-05 mg/L |
| PEAK TIME (y):                         | 8.106548E+02  |
| LIMITING SOIL CONCENTRATION (mg/m**3): | 2.506E+06     |
| LIMITING SOIL CONCENTRATION (mg/kg):   | 1.671E+03     |
| LIMITING INVENTORY IN SOIL (mg):       | 4.962E+07     |



TIME OF RUN 09:13:23.0  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'ARSENIC (carcinogenic): TRA-16 STORAGE TANK' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY 0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 1.10E+00
THICKNESS OF SOURCE (m) 1.00E+01
PERCOLATION RATE (darcy vel m/y) 1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01
BULK DENSITY AT SOURCE (g/cm**3) 1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	3.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	3.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	1.54E+05
MOLECULAR WEIGHT (g/mole)	7.50E+01
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	3.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	4.86E-05
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*

|                                         |            |
|-----------------------------------------|------------|
| LEACH RATE CONSTANT (1/y)               | 2.0833E-03 |
| UNSATURATED PORE VELOCITY (m/y)         | 3.3333E-01 |
| DECAY CONSTANT(S) (1/y)                 | 0.0000E+00 |
| RETARDATION FACTOR(S) (SATURATED)       | 5.8000E+01 |
| RETARDATION FACTOR (UNSATURATED)        | 2.0000E+01 |
| SOLUBILITY LIMITED MASS (mg)            | 9.5040E+10 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 0.0000E+00 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 8.1000E+02 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 0.0000E+00 |

~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION

|                                        |               |
|----------------------------------------|---------------|
| MAXIMUM CONCENTRATION                  | 2.93E-05 mg/L |
| AVERAGE CONCENTRATION                  | 3.44E-05 mg/L |
| PEAK TIME (y):                         | 8.106548E+02  |
| LIMITING SOIL CONCENTRATION (mg/m**3): | 1.097E+04     |
| LIMITING SOIL CONCENTRATION (mg/kg):   | 7.316E+00     |
| LIMITING INVENTORY IN SOIL (mg):       | 2.173E+05     |

TIME OF RUN 09:13:24.5  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:

'MERCURY (non-carcinogenic): TRA-16 STORAGE TANK' TITLE

~~~~~  
GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 4

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY 0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 1.10E+00
THICKNESS OF SOURCE (m) 1.00E+01
PERCOLATION RATE (darcy vel m/y) 1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE 3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 3.00E-01
BULK DENSITY AT SOURCE (g/cm**3) 1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	2.94E-05
MOLECULAR WEIGHT (g/mole)	2.34E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	2.45E+05
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)	3.00E-12
UNITS OF CONTAMINANT	Ci

INPUT DATA FILE CREATED BY: *[Signature]* DATE 8/18/89

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 4.71E+00

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*

|                                         |            |
|-----------------------------------------|------------|
| LEACH RATE CONSTANT (1/y)               | 1.0753E-03 |
| UNSATURATED PORE VELOCITY (m/y)         | 3.3333E-01 |
| DECAY CONSTANT(S) (1/y)                 | 2.8292E-06 |
| RETARDATION FACTOR(S) (SATURATED)       | 1.1500E+02 |
| RETARDATION FACTOR (UNSATURATED)        | 3.9000E+01 |
| SOLUBILITY LIMITED MASS (mg)            | 1.8414E+11 |
| SOLUBILITY LIMITED ACTIVITY (Ci)        | 1.1492E+06 |
| TRANSIT TIME IN UNSAT ZONE (years)      | 1.5795E+03 |
| FRACTION DECAYED DURING UNSAT TRANSPORT | 4.4587E-03 |

~~~~~  
>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years)	30
BODY WEIGHT (kg)	7.000E+01
AVERAGING TIME (days)	2.555E+04
WATER INTAKE RATE (L/d)	2.000E+00
EXPOSURE FREQUENCY (days/year)	3.500E+02
EXPOSURE DURATION (years)	3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y)	4.000E-03
CARCINOGENIC RISK CRITERIA	1.000E-06
HAZARD QUOTIENT	1.000E+00

~~~~~  
>>> RESULTS OF CALCULATIONS

\*\*\*\*\*

MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION

LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 3.00E-12 Ci/L

MAXIMUM GW CONCENTRATION FOR MBR #1: 2.88E-15 Ci/L

AVERAGE GW CONCENTRATION FOR MBR #1: 3.47E-15 Ci/L

PEAK TIME (y): 1.580798E+03

LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 1.282E-03

TIME OF RUN 09:13:25.7  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\*  
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\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'U-234: TRA-16 STORAGE TANK' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	1.10E+00
THICKNESS OF SOURCE (m)	1.00E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	1.00E+02
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	1.00E+02
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	7.13E+03
MOLECULAR WEIGHT (g/mole)	8.00E+01
SOLUBILITY LIMIT (mg/L)	3.00E-02
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	1.00E+38
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	1.00E+02
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING CONTAMINANT GW CONCENTRATION (mg/L)	1.11E-02
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY: *[Signature]* DATE 4/18/94

INPUT DATA CHECKED BY: *Shannon M. Red* DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 6.6534E-05  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 0.0000E+00  
RETARDATION FACTOR(S) (SATURATED) 1.9010E+03  
RETARDATION FACTOR (UNSATURATED) 6.3433E+02  
SOLUBILITY LIMITED MASS (mg) 8.9278E+04  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 2.5690E+04  
FRACTION DECAYED DURING UNSAT TRANSPORT 0.0000E+00  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 1.100E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM NON RADIOLOGICAL CONTAMINANT CALCULATION  
MAXIMUM CONCENTRATION 4.34E-08 mg/L  
AVERAGE CONCENTRATION 4.25E-08 mg/L  
PEAK TIME (y): 2.571196E+04  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 9.405E+07  
LIMITING SOIL CONCENTRATION (mg/kg): 6.270E+04  
LIMITING INVENTORY IN SOIL (mg): 1.862E+09

|                                      |           |
|--------------------------------------|-----------|
| LIMITING SOIL CONCENTRATION (Ci/kg): | 8.547E-07 |
| LIMITING INVENTORY IN SOIL (Ci):     | 2.538E-02 |
| LIMITING INVENTORY IN SOIL (mg):     | 4.067E+03 |
| SPECIFIC ACTIVITY (Ci/g):            | 6.241E-03 |
| EXECUTION TIME (seconds)             | 0         |

TIME OF RUN 09:13:27.1  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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=====

\*\*\*\*\*  
\*  
\* This output was produced by the model: \*  
\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:

'U-238: TRA-15 HOT WASTE STORAGE TANKS' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 3

KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	1.10E+00
THICKNESS OF SOURCE (m)	1.00E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	3.74E-05
MOLECULAR WEIGHT (g/mole)	2.38E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	4.68E+09
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L)	1.71E-12
UNITS OF CONTAMINANT	Ci

INPUT DATA FILE CREATED BY: *[Signature]* DATE 7/18/88

INPUT DATA CHECKED BY: *Shannon M. Reed* DATE 7/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 1.16E+05  
>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 1.0753E-03  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 1.4811E-10  
RETARDATION FACTOR(S) (SATURATED) 1.1500E+02  
RETARDATION FACTOR (UNSATURATED) 3.9000E+01  
SOLUBILITY LIMITED MASS (mg) 1.8414E+11  
SOLUBILITY LIMITED ACTIVITY (Ci) 5.9150E+01  
TRANSIT TIME IN UNSAT ZONE (years) 1.5795E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 2.3394E-07  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
MAXIMUM RADIONUCLIDE CONCENTRATION LIMIT CALCULATION  
LIMITING PARENT GW CONCENTRATION ADJUSTED FOR PROGENY = 1.71E-12 Ci/L  
MAXIMUM GW CONCENTRATION FOR MBR #1: 3.68E-15 Ci/L  
AVERAGE GW CONCENTRATION FOR MBR #1: 4.44E-15 Ci/L  
PEAK TIME (y): 1.580798E+03  
LIMITING SOIL CONCENTRATION (Ci/m\*\*3): 7.274E-04

|                                      |           |
|--------------------------------------|-----------|
| LIMITING SOIL CONCENTRATION (Ci/kg): | 4.850E-07 |
| LIMITING INVENTORY IN SOIL (Ci):     | 1.440E-02 |
| LIMITING INVENTORY IN SOIL (mg):     | 4.484E+07 |
| SPECIFIC ACTIVITY (Ci/g):            | 3.212E-07 |
| EXECUTION TIME (seconds)             | 0         |

TIME OF RUN 09:13:30.0  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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\*\*\*\*\*  
\*  
\* This output was produced by the model: \*  
\*  
\* GWSCREEN \*  
\* Version Control Copy, Version 2.02 \*  
\* A semi-analytical model for the assessment \*  
\* of the groundwater pathway from the leaching \*  
\* of surficial and buried contamination and \*  
\* release of contaminants from percolation ponds \*  
\* 10-11-93 \*  
\* Arthur S. Rood \*  
\* Idaho National Engineering Laboratory \*  
\* EG&G Idaho Inc. \*  
\* Subsurface and Environmental Modeling Unit \*  
\* PO Box 1625 \*  
\* Idaho Falls, Idaho 83415 \*  
\*\*\*\*\*

>>> TITLE OF PROJECT:  
'U-234 (noncarcinogenic): TRA-16 STORAGE TANK' TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 6

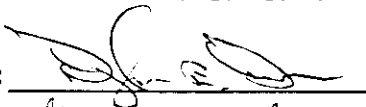
KFLAG: 1 (0) CONC VS TIME; (1) PEAK CONC AND LIMITING SOIL CONC

IMODEL: 1 (1) SURF OR BURIED SOURCE; (2) POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	1.10E+00
THICKNESS OF SOURCE (m)	1.00E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**-1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	4.71E+00
MOLECULAR WEIGHT (g/mole)	2.34E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	2.45E+05
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
NON-CARCINOGENIC REFERENCE DOSE RfD (mg/kg/d)	3.00E-03
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 4/18/94

INPUT DATA CHECKED BY: Shannon M. Reed DATE 4/18/94

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 1.0753E-03  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 2.8292E-06  
RETARDATION FACTOR(S) (SATURATED) 1.1500E+02  
RETARDATION FACTOR (UNSATURATED) 3.9000E+01  
SOLUBILITY LIMITED MASS (mg) 1.8414E+11  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 1.5795E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 4.4587E-03  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
LIMITING GROUNDWATER CONCENTRATION (mg/L): 2.56E-01  
MAXIMUM GROUNDWATER CONCENTRATION (mg/L): 4.61E-10  
AVERAGE GROUNDWATER CONCENTRATION (mg/L): 5.57E-10  
HAZARD QUOTIENT FOR INPUT MASS: 2.18E-09  
PEAK TIME (y): 1.580798E+03  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 1.092E+08  
LIMITING SOIL CONCENTRATION (mg/kg): 7.279E+04

TIME OF RUN 09:13:28.6  
DATE OF RUN 04/18/94  
INPUT FILE NAME: gwscreen.par  
OUTPUT FILE NAME: gwscreen.out

=====

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*
*      This output was produced by the model:      *
*
*              GWSCREEN                          *
*      Version Control Copy, Version 2.02          *
*      A semi-analytical model for the assessment  *
*      of the groundwater pathway from the leaching *
*      of surficial and buried contamination and   *
*      release of contaminants from percolation ponds *
*              10-11-93                          *
*              Arthur S. Rood                     *
*      Idaho National Engineering Laboratory        *
*              EG&G Idaho Inc.                   *
*      Subsurface and Environmental Modeling Unit  *
*              PO Box 1625                       *
*              Idaho Falls, Idaho 83415           *
*
```

\*\*\*\*\*

>>> TITLE OF PROJECT:

'U-238 (noncarcinogenic): TRA-15 HOT WASTE STORAGE TANKS'      TITLE

~~~~~

GAUSSIAN QUADRATURE SOLUTION

MODEL OPTIONS

IMODE: 6

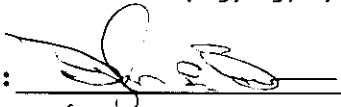
KFLAG: 1 (0)CONC VS TIME; (1)PEAK CONC AND LIMITING SOIL CONC

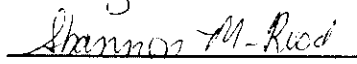
IMODEL:1 (1) SURF OR BURIED SOURCE; (2)POND SOURCE; (3) TABULATED SOURCE FUNCT

>>> INPUT DATA

NUMBER OF RADIOACTIVE PROGENY	0
LENGTH OF SOURCE PARALLEL TO GW FLOW (m)	1.80E+00
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m)	1.10E+00
THICKNESS OF SOURCE (m)	1.00E+01
PERCOLATION RATE (darcy vel m/y)	1.00E-01
VOLUMETRIC WATER CONTENT IN SOURCE	3.00E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE	3.00E-01
BULK DENSITY AT SOURCE (g/cm**3)	1.50E+00

SORPTION COEFFICIENT AT SOURCE (ml/g)	6.00E+00
BULK DENSITY IN UNSAT ZONE (g/cm**3)	1.90E+00
UNSATURATED ZONE THICKNESS (m)	1.35E+01
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g)	6.00E+00
OPTIONAL LOSS RATE CONSTANT FOR SOURCE (y**--1)	0.00E+00
INITIAL MASS OR ACTIVITY (mg or Ci)	1.17E+05
MOLECULAR WEIGHT (g/mole)	2.38E+02
SOLUBILITY LIMIT (mg/L)	1.00E+06
HALF-LIFE(S) OF CONTAMINANT AND PROGENY (y)	4.68E+09
BULK DENSITY OF AQUIFER (g/cm**3)	1.90E+00
POROSITY OF AQUIFER	1.00E-01
SORPTION COEFFICIENT(S) IN AQUIFER (ml/g)	6.00E+00
DISPERSIVITY X DIRECTION (m)	9.00E+00
DISPERSIVITY Y DIRECTION (m)	4.00E+00
PORE VELOCITY (m/y)	4.78E+02
WELL SCREEN THICKNESS (m)	1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)	9.00E-01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)	0.00E+00
NON-CARCINOGENIC REFERENCE DOSE RfD (mg/kg/d)	3.00E-03
UNITS OF CONTAMINANT	mg

INPUT DATA FILE CREATED BY:  DATE 6/15/98

INPUT DATA CHECKED BY:  DATE 4/18/99

~~~~~  
LIMITING SOIL CONCENTRATION CALCULATION

>>> VALUES CALCULATED IN SOURCE SUBROUTINE

\*\*\*\*\*  
LEACH RATE CONSTANT (1/y) 1.0753E-03  
UNSATURATED PORE VELOCITY (m/y) 3.3333E-01  
DECAY CONSTANT(S) (1/y) 1.4811E-10  
RETARDATION FACTOR(S) (SATURATED) 1.1500E+02  
RETARDATION FACTOR (UNSATURATED) 3.9000E+01  
SOLUBILITY LIMITED MASS (mg) 1.8414E+11  
SOLUBILITY LIMITED ACTIVITY (Ci) 0.0000E+00  
TRANSIT TIME IN UNSAT ZONE (years) 1.5795E+03  
FRACTION DECAYED DURING UNSAT TRANSPORT 2.3394E-07  
~~~~~

>>> EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

INTEGRATION TIME (years) 30
BODY WEIGHT (kg) 7.000E+01
AVERAGING TIME (days) 2.555E+04
WATER INTAKE RATE (L/d) 2.000E+00
EXPOSURE FREQUENCY (days/year) 3.500E+02
EXPOSURE DURATION (years) 3.000E+01
RADIOLOGICAL DOSE LIMIT (rem/y) 4.000E-03
CARCINOGENIC RISK CRITERIA 1.000E-06
HAZARD QUOTIENT 1.000E+00
~~~~~

>>> RESULTS OF CALCULATIONS

\*\*\*\*\*  
LIMITING GROUNDWATER CONCENTRATION (mg/L): 2.56E-01  
MAXIMUM GROUNDWATER CONCENTRATION (mg/L): 1.15E-05  
AVERAGE GROUNDWATER CONCENTRATION (mg/L): 1.39E-05  
HAZARD QUOTIENT FOR INPUT MASS: 5.44E-05  
PEAK TIME (y): 1.580798E+03  
LIMITING SOIL CONCENTRATION (mg/m\*\*3): 1.087E+08  
LIMITING SOIL CONCENTRATION (mg/kg): 7.246E+04

## **Appendix C**

### **Memos of Conversation and Summary of 1985 and 1986 HP Log Entries for the MTR TRA-19 Catch Tanks**

MEMO OF CONVERSATION

DATE: January 12, 1993 TIME:  
PERSON CALLING: J. Jessmore  
REPRESENTING ORG: B240  
PERSON CALLED: Wayne Kanedy PHONE #526-4621  
REPRESENTING CO: EGG  
CITY: ID FALLS  
SUBJECT: 1. Excavation project related to replacement  
of TRA-19 (TRA-730) USTs.

Subject #1 Excavation project related to replacement of TRA-19  
USTs.

\* To the best of his knowledge (without project logbooks) the  
following account describes the TRA-19 UST replacement  
project:

Site was excavated prior to the new tanks being  
delivered. Construction was completed and because winter  
was coming soon, two of the old tanks were placed back  
into service.

The following spring, the site was re-excavated, and the  
old vessels were removed and replaced with four new  
vessels.

Note: there was a sump installed in the new vault which  
pumps any liquid that collects in the containment back  
into the existing tanks.

Note: as part of the new design, the east-west running  
warm waste line from the Gamma Facility (TRA-641) was  
routed into the valve pit associated with the new tanks.

Following the second excavation, contamination was  
discovered after a worker set off a facility rad. monitor  
after having been in a part of the excavation digging by  
hand around a line which lead out of the TRA-661 lab  
directly into the TRA-730 USTs. It was discovered that  
the previous season this pipe had been nicked by the  
equipment which caused a small leak.

Action was taken to identify the source of the  
contamination. The soil pile was covered after  
contamination was detected. Samples were taken to RML  
for analysis. Results verified hot waste. Some soil was  
disposed of, but the contamination in the excavation was



left and covered up.

This site is currently posted for subsurface contamination, and has been included in the TRA Baseline Report (author: Steve Laughlin).

Note: Lines are located approximately 8-feet below surface, tanks 20-feet below surface.

Call Cal Rowsell for RML data

MEMO OF CONVERSATION

DATE: January 13, 1993 TIME:  
PERSON CALLING: J. Jessmore  
REPRESENTING ORG: B240  
PERSON CALLED: Wayne Kanedy PHONE # 526-4621  
REPRESENTING CO: EGG  
CITY: ID FALLS  
SUBJECT: 1. Excavation of TRA-19, 630 USTs

Subject #1 Excavation of TRA-19, 630 USTs

- \* Excavation site was checked for alpha and beta/gamma contamination utilizing hand held probes, during operations and after removal was completed.
- \* Field screening identified clean as being 100 counts or less below background rad. levels. Had there been any indication of contamination, procedures would have required a sample to be submitted to RML for further spec. analysis. None were required.
- \* Smears were taken from the exterior of the tanks and removed piping. Analysis indicated no surface contamination was present.
- \* Records of these actions would be documented in daily logs. However, these records have been shipped to Seattle, WA, and the correct box number would have to be known to retrieve them.

## Summary of 1985 and 1986 HP Log Entries for the MTR TRA-19 Catch Tanks

Notes: W/B - whole body  
GT - green tag  
CT - catch tanks  
HP - health physics  
Z - zone

### 1985

July 24, 1985

H.P. Coverage and assistance provided as excavation of  $\alpha$  labs hot waste N/W of catch tanks continued. At about 1130 hrs job was stopped because line could not be located. With V. Briscoe assistance we visually inspected lines running into MTR wing basement and catch tank pump vault in attempt to get a better bearing on line location. Line was finally located at approximately 1500 hrs. 8 boxes (2'x4'x8') was used for contaminated soil during excavation. Soil contamination varied from 300 c/m  $\beta\gamma$  to >50,000 d/m  $\beta\gamma$  and was kept moist during excavation. Piping read  $\leq 120$  mr/hr  $\beta\gamma$  at contact with top. Area of excavation was ribboned as Z-1 to reduce traffic and at shift end the poly used under dirt boxes was rolled up and trashed. Also the area of where boxes were placed was scraped down 1" with backhoe and soil placed in Buay box. No personnel contamination noted at job conclusion and  $\leq 20$  mr W/B exposures. At 1350 hrs hi-vol filter was pulled and delivered to the RML. Filter analysis showed only 9 c/m  $\text{Cs}^{137}$  and Ra-TH for 20 min. count. Based on that information I removed H.P. tags of "Possible Air Activity" that had been placed around entire perimeter.

July 25, 1985

H.P. coverage and assistance provided as excavation of MTR  $\alpha$  wing hot waste line was concluded. Detailed survey of pit prior to entry and hand excavation showed 5-10 mr/hr  $\beta\gamma$  GBF and contamination survey of (5) soil samples showed approximately 300 c/m  $\beta\gamma$  to  $\leq 8,000$  c/m  $\beta\gamma$  with RM-14. C #3 showed wet sample at 8,400 c/m  $\beta\gamma$ , 6 c/m  $\alpha$ , dry sample = 10,630 c/m  $\beta\gamma$ , 4 c/m  $\alpha$ . Delivered soil sample to RML and analysis showed  $\text{Co}^{60}$ ,  $\text{Cs}^{134}$ ,  $\text{Cs}^{137}$  and  $\text{Eu}^{154}$ . During excavation of "T" in hot waste line GBF went up to 80 mr/hr  $\beta\gamma$  at 2' and pipe went from 180 mr/hr  $\beta\gamma$  to 1,000 mr/hr  $\beta\gamma$  at contact. Radiation tags were placed on 2-1 ribbons surrounding small pit. T. Taylor (laborer) exited pit at completion of hand excavation and survey in HPO showed contamination on his elbow and blues to  $\leq 600$  c/m  $\beta\gamma$ . Blues were confiscated and elbow deconned with  $\text{H}_2\text{O}$ . I reminded him of need to use caution when hand excavating in pit's or further anti-C's requirements would be necessary. Note: This is first personnel contamination on job. Pit was kept moist during excavation. The backhoe bucket was rinsed off over pit and a general wash down of backhoe made Z-1 area - detailed contamination survey of backhoe with RM-14 and smears showed no contamination present and G.T. to CPP was issued. All hand tools and ladder were rinsed down and smeared  $\leq 45$  c/m  $\beta\gamma$  - okay after 2nd decon.

**July 26, 1985**

H.P. coverage and assistance provided as shoring was set-up in pit next to  $\alpha$  wing in preparation to cut hot waste line and cap it. Obtained a german saw from ATR hot tool box and set-up manifold box. Job of cutting line was never completed as Atlas fitter had WBC scheduled at CFA and never returned to MTR until 1530 hrs. At 1530 hrs area was cleaned-up and tools deconned. Stored tools and equipment in HPO counter gas bottle shed. No personnel contamination noted and  $\leq 10$  mr W/B exposure.

**July 29, 1985**

Constant H.P. coverage and assistance provided at 3" pipe was replaced in the CT #3 suction line and dead dura-iron line from  $\alpha$  wing was penetrated and checked for liquid. No problems encountered during 3" line installation. After penetrating top of dura-iron pipe a swab dipped into line showed 3" of  $H_2O$  still present and litmus paper check of liquid showed pH of "9" (slightly acidic).<sup>b</sup> Count of swab in C#3 showed 41,400 c/m  $\beta\gamma$  and 250 c/m  $\alpha$  present. Job was stopped and area cleaned-up. No personnel contamination noted and  $\leq 45$  mr W/B exposure.  $H_2O$  in line to be pumped down to CTs B-4 cutting line.

**July 30, 1985**

Constant H.P. coverage and assistance provided as 1"x1" hole was cut in top of dura-iron line with peanut grinder and  $H_2O$  pumped from line into catch tank sample station drain. Approximately 12 gallons  $H_2O$  were pumped from line. Note: several problems encountered with pump and could not remove last 1/4-1/2" of  $H_2O$  in line. Drippage from pump and line was minimal during pumping. A bucket was used to transport last part of  $H_2O$  to drain. Sample of sludge coming from bottom of pipe read 2 r/hr  $\beta\gamma$  at contact w/RO-2A and 30,000 c/m  $\alpha$  w/ model #61. G. Hill had contamination present on blues knee which went through yellows from mud in pit. Blues were confiscated. Fitter's (3) had a total of 110 mr/hr W/B exposure during pumping for the job today. General clean-up of area made at shift end. Note: bagged a lead blanket which was placed over pipe up to cut location which reduced GBF to 50 mr/hr  $\beta\gamma$  at approximately 3 feet and approximately 100 mr/hr  $\beta\gamma$  at 2 feet. F/F airlines worn while cutting hole in pipe. Discussed possibility of obtaining wet/dry vacuum to complete removal of  $H_2O$  from pipe. Discussion held with V. Briscoe and P. Desjardin's present.

**July 31, 1985**

Constant H.P. coverage and assistance provided as dura-iron line from  $\alpha$  wing labs was cut and capped. Before starting job a detailed contamination survey was made of pit due to rain water from previous night swamping hole and pipe refilling with 3" of  $H_2O$  again. Pump used on job from previous day was saturated with contaminated mud and disposed of in hot waste with V. Briscoe's approval. Contamination survey showed 400-1,300 c/m  $\gamma$  approximately 1 ft. above bottom of pit and 4,300-22,000 c/m  $\gamma$  in bottom of pit. A wet-dry vacuum was used to remove  $H_2O$  from pipe with approximately 15 gallon's removed and disposed of down sample station drain

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b. The log incorrectly states that a pH of 9 is slightly acidic. A pH of 9 is slightly basic, not acidic.

pipe. Water removed from pipe read  $\leq 400$  mr/hr  $\beta\gamma$  in vacuum canister and  $\leq 1,300$  mr/hr  $\beta\gamma$  at contact with vacuum filter. Vacuum was bagged at job completion. GBF varied from 10-200 mr/hr  $\beta\gamma$  during snapcutting and capping of line. Acid suit's and F/F airline resp's. worn during job. No personnel contamination noted and  $\leq 30$  mr W/B exposure received to fitter's. Hi-vol turned back on per P. Desjardins request. Containment was built under pipe before cutting and left after job.

#### August 1, 1985

Constant H.P. coverage and assistance provided as airline in  $\alpha$  wing line pit was spliced (leaking), propane line to chem labs was cut and 4" s/s line to CT # ??? was capped. A H<sub>2</sub>O sample taken from containment left under  $\alpha$  wing dura-iron line showed approximately 91,000 c/m  $\gamma$  in deepwell. H<sub>2</sub>O was sampled to see if caps on line may have leaked on back-shift during hot cell deconning. Hot-cell estimated approximately 300 gallons of H<sub>2</sub>O were used. Containment was holding approximately 1 qt. of H<sub>2</sub>O and after discussion with operations personnel it was felt contamination was left from previous day's work and cap did not leak. Containment was vacuumed out to be checked again at start of shift 8-2-85. Prior to repairing airline in pit, an additional lead blanket was placed over 4" dura-iron line reducing contact reading of 800 mr/hr  $\beta\gamma$  at line to  $\leq 125$  mr/hr  $\beta\gamma$  at blankets. GBF was reduced from 80 mr/hr  $\beta\gamma$  to 25 mr/hr  $\beta\gamma$  at 2" and  $\leq 5$  mr/hr  $\beta\gamma$  during airline repair at approximately 5 ft. from pipe. Contamination survey of tools after decon used in  $\alpha$  wing line pit showed  $\leq 40$  c/m  $\beta\gamma$  smearable and were okay after second decon. Tools were then transferred to catch tank pit and used for propane line removal. No contamination found on tools after that job. A 2'x4'x8' bury box was placed in catch tank pit for excavation 4" s/s line to CT# ???. Line had econo-plug installed which was removed and s/s cap welded in place. Prior to removing plug containment was set-up to catch possible H<sub>2</sub>O from line. Approximately 15 gallons of H<sub>2</sub>O came from line which was vacuumed from containment and poured down sample station drain line. GBF around pipes was  $\leq 5$  mr/hr  $\beta\gamma$ . At job completion general clean-up was made of entire work area. Miscellaneous hand tools deconned previous day were surveyed with no contamination found. Also seven soil samples taken in catch tank pit at shift start showed no contamination spread from previous nights rain. Changed and took hi-vol filter to RML. No activity noted on RML analysis.  $\leq 10$  mr W/B exposures and no personnel contamination noted during shift. Anti-Cs and resp. requirements varied with all (3) jobs.

#### August 2, 1985

H.P. coverage and assistance provided as 3" s/s cap was welded into C.T.# ??? line. Detailed contamination survey of soil after clean-up in large pit of containments. No contamination found. Removed Z-III tags on perimeter safety rope. No personnel contamination noted and  $\leq 45$  mr/W/B exposures received during hand excavation of piping.

#### August 5, 1985

Constant H.P. coverage provided as back-hoe and hand excavation of C.T. piping continued. No radiation increase of west piping noted. Set-up containment to cut east C.T. piping by pump vault. No piping was cut as C.T.# ??? will not pump down after several attempts by operations. Completed SWP to enter vault and remove discharge side of air eductor - 10 mr W/B exposure to

fitter and tank still did not pump down. Notified operations of okay to restart MTR fresh-air down take fans.  $\leq 50$  mr W/B exposure during excavation of piping and no personnel contamination noted. Took used anti-C's to issue room.

#### August 7, 1985

Provided coverage for work on piping. The cap on the pipe in the "hot" hole was removed and replaced. Worker picked up approximately 80 mrem on his dosimeter. Work continued in the big hole for cutting and capping pipe. Some digging was also done. No contamination detected on removed dirt. All H<sub>2</sub>O spillage was contained in Poly and vacuumed up and dumped.

#### August 8, 1985

Constant H.P. coverage and assistance provided as rip-out of MTR catch tank lines continued. Radiation survey of lines that needed hand excavation read  $\leq 250$  mr/hr  $6\gamma$ . After cutting and capping of 2" sump drain line approximately 8 gallons of H<sub>2</sub>O from in lines was transported to lab #128 and dumped down drain. Ribboned and tagged pit as Z-II area. Personnel contamination was minimal and  $\leq 35$  mr W/B exposures. Pulled hi-vol filter at shift end and delivered it to the RML.

#### August 9, 1985

Constant H.P. coverage and assistance provided as rip-out of MTR catch tank piping continued. Requested clean-up of soil in areas where H<sub>2</sub>O spilled from piping. Transported H<sub>2</sub>O in vacuum bucket to  $\alpha$  lab #128 and disposed of down warm drain. Clean-up of tools and hole was made prior to quitting time. Confiscated contaminated blues which showed contamination at job completion. Personnel exposures were  $\leq 65$  mr W/B. Received RML analysis of filter pulled 8-8-85. Results showed Cs<sup>137</sup> and Co<sup>60</sup> at lower than MPC levels. Also requested known and allowed exposures of all construction personnel from CFA dosimetry.

#### August 12, 1985

Constant H.P. coverage and assistance provided as MTR catch tank piping rip-out was completed. All piping was drained and sealed with poly bags at end's before placing in hot waste box. All waste in hole was also trashed. Non-comp. waste box read  $\leq 110$  mr/hr  $6\gamma$  at contact,  $\leq 20$  mr/hr  $6\gamma$  at 3 ft. and was removed from pit. No contamination found on box. All tools in pit were bagged and a decon area set-up in Zone 1. Tools which were smeared after decon showed 60-1,200 c/m  $6\gamma$  smearable and tools were bagged again for another decon attempt. Removed Z-II ribbon and tags around large pit as contaminated soil in pit was covered-up with clean soil during excavation of gamma building drain line. Contaminated soil in pit was kept moist during excavation of drain line. Note: After returning from lunch water was observed leaking from hot cell drain line in small pit by  $\alpha$  wing labs.

I called hot-cell and requested immediate stop of using H<sub>2</sub>O in hot-cell and requested assistance from operations. A valve was found to be closed at Hot Waste Storage Station. Atlas Mechanical feels that man-hole around hot cell valve settled and opened gap in valve line. Valve will be repaired as soon as possible. Personnel exposures were  $\leq 50$  mr W/B and personnel

contamination was noted on K. Brizzee and my hands which was deconned with soap and H<sub>2</sub>O in HPO sink.

#### **August 13, 1985**

H.P. coverage and assistance provided as drain line from gamma building was tapped to assess conditions or if H<sub>2</sub>O is present. 1/4" tap in pipe allowed H<sub>2</sub>O to squirt from pipe approximately 2" up and approximately 1/2 gallon of H<sub>2</sub>O escaped during plugging of pipe and placing no-hub coupling on pipe. Contaminated dirt was scooped-up and placed in poly bag. Deepwell count of 1 ml of H<sub>2</sub>O showed approximately 500 c/m  $\alpha$  and dry count showed 380 c/m  $\beta\gamma$ , 6 c/m  $\alpha$ . Job was stopped to plan handling of approximately 425 gallons of H<sub>2</sub>O estimated to be preset in piping. Detailed radiation survey of pit showed  $\leq 25$  mr/hr  $\beta\gamma$  at piping and  $\leq 3$  mr/hr  $\beta\gamma$  GBF. Removed radiation signs on safety rope around excavation and placed contamination present signs on post's per B. Lebsack's request. Pulled hi-vol filter and delivered to RML. Analysis showed Cs<sup>137</sup> at  $1.43 \times 10^{-15}$  uci/cc for approximately 4.5 day run time. Air activity is presenting no hazard to personnel at this time as discussed with P. Desjardins. No personnel contamination and  $\leq 5$  mr W/B exposures.

#### **August 14, 1985**

H.P. coverage and assistance provided as containments were built for draining gamma building line and cutting/tapping into MTR catch line. Placed clean H<sub>2</sub>O into large containment and made test run of submersible pump. Pump okay. Contamination survey made with RM-14 of contaminated area north of hot cell to reduce ribbon size.  $\leq 2,000$  c/m  $\beta\gamma$  w/RM-14 detected. Moved ribbon in as much as possible. No personnel contamination noted and minimal W/B exposure received. Also placed safety rope across new access to excavation and did general clean-up of area.

#### **August 15, 1985**

H.P. coverage and assistance provided as 4" warm drain line from  $\gamma$  building was drained into large containment and pumped into catch tank #4 line which was modified with ball valve. Approximately 200 gallons of contaminated H<sub>2</sub>O was drained from line. 50'-60' of 4" drain line was taken separated at unions, bagged and sealed then removed from pit with back-hoe. Tools and trash were then removed from pit. No personnel contamination noted and  $\leq 5$  mr W/B exposure.

#### **August 16, 1985**

H.P. coverage provided as manhole was lifted from hot cell drain line and line leak checked. Leak was coming from saddle around pipe. Manhole was bagged and sealed. Contamination survey of  $\gamma$  line drain piping,  $\leq 120$  c/m  $\beta\gamma$ . Wrapped pipes in poly. Contamination survey of soil during excavation of S/E catch tank showed no contamination. Personnel exposures were  $\leq 55$  mr W/B and G. Hill had contamination on his blues and back of neck after checking hot cell drain line. Confiscated blues and deconned neck with soap and water. No other contamination noted.

#### **August 19, 1985**

H.P. coverage and assistance provided as hot cell drain line was repaired (temporarily) and excavation of east catch tanks continued. Hot-cell drain line was repaired with ABS pipe and no-hub couplings. Personnel exposure to repair line was 65 mr W/B and no contamination noted at conclusion of repairs. Old pipe and saddle were bagged and disposed of non-comp waste.  $\leq 50$  mr/hr  $6\gamma$  at bag. During excavation of east catch tanks a 8" sewer line was ruptured with the backhoe and operations assistance was requested. GBF around tanks is 5 mr/hr  $6\gamma$  at 10',  $\leq 100$  mr/hr  $6\gamma$  between tanks and  $\leq 250$  mr/hr  $6\gamma$  at tanks. At approximately 1600 hrs. contaminated soil reading 2,000-5,000 c/m  $6\gamma$  was noted to be present coming from N/E corner of excavation near the pump vault. Contaminated soil (2 buckets) placed on clean soil removed from pit was covered with poly and digging operation stopped. Will request waste boxes in a.m. of 8-20-85 and will determine extent of contamination spread with hand excavation if possible. Personnel W/B exposures during tank excavation were  $\leq 25$  mr W/B and no personnel contamination noted.

#### August 20, 1985

H.P. coverage and assistance provided as contaminated soil was cleaned-up from clean soil at S/W side of pit and placed into non-comp waste boxes. Also a detailed contamination survey of N/E corner of pit was done to assess extent of contamination spread in soil. Area of contamination was identified with paint. Soil read 1,000-5,000 c/m  $6\gamma$  with RM-14. Also monitored as sewer line repair was started. Job was stopped when soil bank under conduit concrete fell away and covered work area. Approximately 4 yards of soil fell away from bank. No personnel injuries received as bank was being watched carefully and warning was issued prior to bank sloughing. Posted area of east bank with "Danger-Do Not Enter" signs. Personnel exposures were  $\leq 25$  mr W/B. Only personnel contamination noted was on G. Hill's left knee after going to cafeteria and alarming LAD. He had not worked in any contaminated areas prior to lunch  $\leq 800$  c/m  $6\gamma$  on knee - blues were confiscated. Also received last hi-vol filter results - only activity was  $\text{Cs}^{137}$  at  $7.09 \times 10^{-10}$  ci per filter.

#### August 21, 1985

H.P. coverage and assistance provided as MTR catch tank excavation continued. Contaminated soil at S/E corner of pump vault was characterized for extent of spread source. Source of spread is from  $\text{H}_2\text{O}$  leaking through vault where floor and walls met when vault was built. Maximum detectable contamination is still  $\leq 5,000$  c/m  $6\gamma$  with RM-14. Detailed radiation survey of tanks (2) and excavation area was made. Reroped entire area with radiation rope and tagged with current conditions.  $\leq 250$  mr/hr  $6\gamma$  at tanks, 3-10 mr/hr  $6\gamma$  at pit perimeter,  $\leq 1$  mr/hr  $6\gamma$  at ropes. Pulled hi-vol filter and turned into RML for analysis. Tagged (2) hot waste boxes with contaminated soil, 0.1 mr/hr  $6\gamma$  at contact. Also monitored as sewer line was repaired after line was uncovered of soil which sloughed off from wall on 8-20-85. No personnel contamination detected and  $\leq 20$  mr W/B exposures received.

#### August 22, 1985

H.P. coverage and assistance provided as MTR catch tank excavation continued. Decision was made to remove contaminated soil by pump vault after tanks are removed. Covered and stabilize soil with poly sheeting. Contamination survey made of tools after last portion of  $\gamma$  building drain line was cut and removed from pit.  $\leq 3$  mr/hr  $6\gamma$  at external of pipe and no contamination found



on tools. Received hi-vol results from RML. Analysis showed  $\text{Cs}^{137}$  at  $7.13 \times 10^{-21}$  curies per cc. No personnel contamination noted and  $\leq 15$  mr W/B exposures. Third catch tank was exposed with  $\leq 20$  mr/hr  $\delta\gamma$  at contact detected. Soil coming from around vault was surveyed continually with no contamination detected.

#### **August 23, 1985**

H.P. coverage and assistance provided as excavation of MTR catch tanks was concluded. Fourth tank was exposed and it reads  $\leq 30$  mr/hr  $\delta\gamma$  at contact. No contamination was detected in soil during excavation. Surveyed and issued (2) G.T.s for both backhoe's going to CPP. An attempt was made to pump contaminated  $\text{H}_2\text{O}$  from man-hole at center of excavation but pump failed. A plywood disc was obtained from carpenter shop and placed in manhole to keep dirt from filling hole during removal of 4' section of manhole. Section was removed with no problems. Contamination survey made of Atlas tools after decon showed  $\leq 2,000$  c/m  $\delta\gamma$  fixed on channel locks. Placed in contaminated tool bag. K. Brizze had 65 mr W/B exposure for the day with  $\leq 20$  mr W/B for other personnel. No personnel contamination detected. Made general clean-up of job site at end of shift.

#### **August 26, 1985**

H.P. coverage and assistance provided as hand excavation of catch tanks continued for slinging and lifting tanks from pit 8-27-85. Laborer received 40 mr W/B during excavation and cleaning pipe nest of soil. I took several soil samples from pit, valve nests and pea gravel under tanks. No contamination found. Removed contaminated area signs from pit perimeter and posted area in pit with poly sheeting as contaminated area. With V. Briscoe's assistance  $\text{H}_2\text{O}$  level in tanks was checked after Atlas Mechanical cut 4" pipes out of valve nest's of each tank.  $\text{H}_2\text{O}$  levels were 5" up to 12" and yard sticks used for measurements read 5-10 mr/hr  $\delta\gamma$  in  $\text{H}_2\text{O}$  w/GM and  $\leq 80$  mr/hr  $\delta\gamma$  at stick ends which scraped bottom of tanks. I also set-up containments for cutting 4" pipe from value nest's. My W/B exposure was 70 mr W/B after several entries into pit. No personnel contamination detected. Surveyed and issued G.T. for front-end loader going to CPP.

#### **August 28, 1985**

Provided coverage as construction removed the 4 catch tanks from the pit. Average exposure received for the 4 workers 50 mrem. Ribboned off or tagged tanks moved to HWST valve area. Also notified outer area operator supervisor of conditions.

Monitored for work on the hot cells drain line. 100-150 mr/hr body field. Hill picked up approximately 20 mrem on his dosimeter.

#### **August 30, 1985**

Surveyed a backhoe to go to CPP. Issued G.T. after 1 hot spot of dirt was removed.

#### **September 10, 1985**

General clean-up made of MTR catch tank excavation site.

**September 12, 1985**

Took 5 H<sub>2</sub>O samples from inside stand pipe at bottom of MTR catch tank vault. No contamination found in deep well or dry sample. Okayed construction to fill pipe with soil.

**November 21, 1985**

H.P. coverage and assistance provided as piping from old catch tanks were removed, wrapped in poly and disposed of into non comp waste box. Piping read  $\leq 5$  mr/hr  $6\gamma$  at contact. Contamination survey of tank tops and work area showed 1 smear on tank top of 100 c/m  $6\gamma$ . Could not repeat. Soil knocked loose from tank end flanges showed  $\leq 800$  c/m  $6\gamma$  and survey of floor area in pit after cleaning-up soil showed no contamination. Personnel exposures were  $\leq 30$  mr W/B on pencil dosimeters and no personnel contamination detected.

**November 27, 1985**

Contamination survey made of MTR catch tank pit after Atlas Mechanical uncovered flanges to align bolt holes for welding drain piping. 100-300 c/m  $6\gamma$  found on piping nest at top of tanks. Flanges on side of tank and on ground below tank end flanges. No general contamination spread noted on pit floor area. Advised Atlas of conditions and advised use of H.P. vacuum for decon of contaminated areas. No personnel contamination noted.

Changed out H.P. vacuum bag after Atlas reported that vacuum quit working after about 15 minutes use. Bagged and disposed of waste and bag. No personnel contamination was noted.

**December 4, 1985**

Contamination survey of airlines prior to welding. No contamination found.

**December 5, 1985**

Contamination survey of airlines before cutting and welding and tools at job completion. No contamination found.

**December 6, 1985**

H.P. coverage provided as (2) 4" discharge lines were cut and welded. Both lines were frozen solid (H<sub>2</sub>O) and assisted in contamination control during cutting with porta-band. Contamination survey of pipe externally before welding showed no contamination. No personnel contamination noted at job conclusion. All tools and bagged and sealed. All garbage and used anti-Cs were disposed of properly. Personnel exposures were  $\leq 20$  mr W/B.

**December 9, 1985**

Received notification that H<sub>2</sub>O was leaking from pipe on catch tank job and H.P. assistance was needed. Responded to job and found G. Hill by 4" drain line to C.T. #3 with a bucket catching H<sub>2</sub>O which was squirting approximately 8" out of pipe around weld. Fitters in pit were advised on

attaching poly sleeving to blind flange end of pipe and drain H<sub>2</sub>O from pipe into catch tank. After shutting down valves from α labs and MTR-635 to catch tank #3 leak was stopped. Approximately 12 gallons of H<sub>2</sub>O was caught in buckets and approximately 30 gallons was dumped into catch tank through sleeving.. Blind flange was sealed back-up and enclosed in a poly bag after H<sub>2</sub>O leak was stopped. Area below pipe where H<sub>2</sub>O leaked was scooped up of snow and soil. H<sub>2</sub>O sample approximately 10 mils. read 10,000 c/m in deepwell. Water was left in bucket's down by vault to freeze over-night and transport to hot sink in morning to prevent spillage. Leak occurred when fitter was grinding root weld done 12-6-85. After leak was stopped pipe was wiped down and welded shut again. At 1610 hrs. valves were opened-up again and no leak observed. Personnel contamination was as follows: G. Hill had 1 contaminated rubber boot on LAD, B. Koehler had a knee contaminated to ≤600 c/m 6γ on EG&G insulated coveralls and that was removed with scissors, J. Furniss had a pair of leather gloves that became contaminated and were disposed of in combustible waste. Personnel W/B exposures were ≤30 mr.

#### **December 10, 1985**

Contamination survey of catch tank piping (4" discharge) at completion of welding. 40-160 c/m 6γ smearable.

#### **December 12, 1985**

Direct radiation and contamination survey of catch tank area. 5-50 mr/hr 6γ GBF in pit and at piping from valve pit to vault. 40-100 c/m 6γ smearable on tanks. No contamination found on floor area of vault. Samples taken from snow and soil areas at vault where piping was cut showed 5-15,000 c/m 6γ in approximately 60 mils after melting.

#### **December 16, 1985**

Retagged catch tank area according to conditions as job was closed out unit spring. Visual inspection made of tank area showed some snow removal will be required from pit when temporary lid is removed and permanent installed.

#### **December 19, 1985**

Checked H<sub>2</sub>O leaking from blind flange into catch tank vault. Tank approximately 5 mil sample and it counted 6,500 c/m.

## **1986**

**January 3, 1986**

Surveyed water on floor of pits contamination was 300 c/p over background.

**January 17, 1986**

Surveyed pit after decon (floor walls) no contamination detected.

Advised (2) Cajun construction personnel of requirements and procedures for deconing floor area of new vault. Vault is smearing Z-I levels. Assisted in obtaining equipment and tools for job.

**January 23, 1986**

Surveyed tools no contamination detected green tag issued.

**January 28, 1986**

Surveyed tools no contamination detected green tag issued.

**February 27, 1986**

Surveyed while sample was taken, no high rad was encountered.

**February 28, 1986**

Monitored while samples were being taken. Then surveyed bottles after Rad readings were 100 mr/hr at contact and 120 mr/hr at contact. No contamination on bottles. Samples were then tagged.

**April 17, 1986**

Surveyed and tagged MTR catch tank samples. 30-60 mr/hr  $\beta\gamma$  at contact and 900 d/m  $\beta\gamma$  smearable. No contamination found after placing samples into poly bags.

**April 21, 1986**

Constant H.P. coverage and assistance provided as removal MTR catch tank piping for catch tank change-out was started. Direct radiation survey of pit and tanks showed high radiation field at east tank of 200-400 mr/hr  $\beta\gamma$  GBF at top and side of tank, 1500-2000 mr/hr  $\beta\gamma$  GBF around west tank, 400 mr/hr  $\beta\gamma$  GBF under west tank, 10-50 mr/hr  $\beta\gamma$  GBF around remainder of pit, 20 mr/hr  $\beta\gamma$  GBF at pit entrance. Advised Atlas Mechanical personnel and job foreman at CPP (G. Hill) of conditions. 200 mr exposure authorized for job. All preparations were made for contaminated liquid remaining in the piping with sleeving used to funnel liquid into double bagged 32 gallon trash can and pit was blotter papered. Anti-Cs and full face respirators worn during job. Paper

toweling and poly bags were placed into and over ends of all piping removed. First pipe removed spilled contaminated liquid down north wall and onto blotter paper. Blotter paper at spill was removed and disposed of into trash can which caught approximately 1 gallon total of contaminated liquid. 30 ML's of liquid sampled showed 600 mr/hr  $\beta\gamma$  & 100 mr/hr  $\gamma$  at contact. Contamination survey of north wall & floor where paper had 1" gap showed  $2.9 \times 10^4$  -  $1.37 \times 10^6$  d/m  $\beta\gamma$ , 250-2700 d/m  $\gamma$  smearable. Advised V. Briscoe of conditions and requested labor support. Personnel exposures after removing charging and discharging lines only, showed 60-180 mR exposures on SRDs to Atlas personnel and 140 mR exposure on SRD to myself after approximately 2 hours working time. No personnel contamination was detected at job completion. Poly bags and Kimwipes used to seal all flanges opened.

#### April 23, 1986

H.P. coverage and assistance provided as Atlas Mechanical completed disconnecting piping to raise catch tanks and clean-up was made of pit with 2 laborers assisting. Contamination survey of area before clean-up of north wall and blotter paper before decon showed wall and floor, = 5,000-88,000 d/m  $\beta\gamma$ , 40-170 d/m  $\alpha$ . Blotter paper = 2,400-5,400 d/m  $\beta\gamma$ , 25-40 d/m  $\alpha$ . All waste and used anti-C's were bagged, tagged and disposed of in proper locations. 32 gallon trash cans removed which contained the contaminated liquid from piping showed 5 mr/hr - 1.5 R/hr  $\beta\gamma$  at contact with no external contamination. All bags removed from pit were double-bagged and no contamination spread was noted on vault top. Tools used by Atlas were bagged and placed into cabinet at HP storeroom. Bags read 0.1-12 mr/hr  $\beta\gamma$  at contact and cabinet was tagged. No personnel contamination was noted during shift and W/B exposures on SRD's were 15-90 mR. Z-III anti-C's and F/F respirators were worn during clean-up of pit.

#### April 24, 1986

Constant H.P. coverage provided as vault lids and the 2 catch tanks in the pit were removed then transferred to the southeast corner of the TRA area for storage until removal to RWMC. Prior to removing the lids a detailed contamination survey of the pit and equipment still remaining was made. Floor area showed 400-7,200 d/m  $\beta\gamma$ , north wall showed 300-3,800 d/m  $\beta\gamma$ , tanks showed 400-5,000 d/m  $\beta\gamma$  and 1 ladder showed 17,000 d/m  $\beta\gamma$ , 140 d/m  $\alpha$  which was bagged prior to removing lid. Piping in pit showed 500-2,500 d/m  $\beta\gamma$ . Pit was tagged as Z-II area. Completed SWP's for job and briefed crew prior to removing lid's. When lids were removed 15 mr/hr  $\beta\gamma$  was seen at catch tank vault top (valve pit) 50-150 mr/hr  $\beta\gamma$  was seen at tank vault edge, 5-15 mr/hr  $\beta\gamma$  seen at crane cab, 80 mr/hr  $\beta\gamma$  GBF at forklift seat used to transport tank from east side of pit, 20 mr/hr  $\beta\gamma$  at forklift seat to transport west tank. EO used Nycon slings to transport tanks which showed no contamination present but his leather gloves were contaminated and confiscated. A 4'x4'x8' plywood hot-waste box was obtained and all piping was removed from the pit. Only piping not put in the box was 2" vent line which surveyed at 0.5-1.5 mr/hr  $\beta\gamma$  at contact and 2,000-4,000 d/m  $\beta\gamma$  internal contamination. Awaiting decision on 2" vent pipe. Valves and piping put in hot waste box read 15-100 mr/hr  $\beta\gamma$  at contact. Trashed the contaminated wood ladder and 2"x4" boards that tanks had been spotted on the pit. Box read 35 mr/hr  $\beta\gamma$  at contact and 3 mr/hr  $\beta\gamma$  at 3 feet. Box to be moved into RMF where valve retrieval can be done right in box under Z-III conditions. I. Furniss (Atlas Supervisor) had contaminated leather gloves at end of shift and contamination of 30,000 d/m  $\beta\gamma$  on his coat sleeve cuff. Replaced his gloves from EG&G tool crib and confiscated his coat for decon. No other personnel contamination noted and W/B

exposure on SRD's was 0-35 mR. Note: When attempt was made to spot a new tank on the studs set in the floor they did not match feet on tanks and a side-arm grinder was obtained which was used to remove 1 row of studs from each tank location (4). 2 tanks were set.

#### **April 25, 1986**

Intermittent H.P. coverage provided as last 2 tanks and lids were reset on catch tank pit vault. GBF survey with GM prior to job showed 2-3 mr/hr  $\beta\gamma$  GBF near north wall originating from piping and valve pit vault. 100 mr/hr  $\beta\gamma$  at 2" line coming from sump pit in valve pit. Requested labor support from Cajun construction to do general clean-up of pit area- surveyed items being trashed. Old man-hole lid showed 200-400 c/m  $\beta\gamma$  w/Rm-14, identified spot in soil by south wall of  $\alpha$  wing which read 8,000 c/m  $\beta\gamma$  w/RM-14 and concrete block laying there showed contamination on bottom side to 2,000 d/m  $\beta\gamma$  w/RM-14. No other contamination was found. Block was disposed of in hot waste. Follow-up clean-up to be on soil on April 28, 1986. Contamination survey of crane and slings used showed no contamination present and G.T. was issued to CPP. Personal W/B exposures 0-10 mR on SRD's.

#### **April 30, 1986**

Smear tanks and floor following decon attempt yesterday. Most smears <1000 d/m above background, but one counted 18,000 d/m.

#### **May 1, 1986**

Detailed contamination survey made of vault after decon by laborers. Vault contamination levels showed Z-III after previous survey's showed Z-I or Z-II. Large area wipes on north wall showed 30 mr/hr  $\beta\gamma$  w/GM. North east floor area was 29,000 d/m - 4,000,000 d/m  $\beta\gamma$ . Wall smears of north west showed 9,200 d/m - 52,00 d/m  $\beta\gamma$ . All other smears were Z-II except pipe coming from valve pit sump which was  $2,800-2.65 \times 10^6$  d/m  $\beta\gamma$ . Advised B. Lebsack, V. Briscoe of conditions.

#### **May 2, 1986**

Detailed contamination survey of vault to identify contamination spread source. Smears verified pipe from valve as probable cause - conditions same as May 1, 1986.

#### **May 5, 1986**

H.P. coverage and assistance provided as entry was made in vault to open piping sealed in poly bags and identify other sources of contamination spread. At 0930 hrs construction personnel reported that H<sub>2</sub>O was running in pit from pipe. By looking down into pit from man-hole entrance H<sub>2</sub>O was observed to be squirting from 1¼" sump pit line and Tygon tubing connection going to N/E catch tank. H<sub>2</sub>O was squirting out in a 4" radius and onto ceiling. Contacted V. Briscoe who turned off sump motor. Entry was later made into pit and with Atlas Mechanical's assistance the flanged lines from the pipe removals of 4/21-4/25 were opened and inspected for leaks. The only line observed to not be closed properly was the 2" valve pit sump line. 3 gallons of H<sub>2</sub>O were present in the ploy bag secured to the flange. H<sub>2</sub>O was drained from bag into a

bucket and set aside to be dumped. H<sub>2</sub>O sample showed 866,000 d/m βγ in deepwell counter for 10 ML's. A ½" pipe nipple with cap on flange end was hand loosened, bolt and nut on flange was also hand loosened and ½" drain plug on pipe bottom was tightened 3 turns. Tightened the bolts and ½" cap nipple. Rebagged pipe ends with no other leaks observed. While in the pit the Tygon tubing was wired to the 1¼" sump pit line and caulking placed around tubing going to the pipe. Also wired the tubing into the N/E catch tank. The H<sub>2</sub>O and mud that came into the vault over the weekend came from the N/W 6" spare piping penetration.

#### **May 6, 1986**

H.P. Coverage and assistance provided as catch tank vault was cleaned up of tools, supplies and miscellaneous equipment. Tygon tubing from sump vault was tested with only a small leak rate observed and catch bucket was secured in place. Sump pump was used to lower H<sub>2</sub>O elevation in vault, 2" of H<sub>2</sub>O was present. After being pumped down the bucket of highly contaminated H<sub>2</sub>O from valve pit pipe was poured into sump pit and pumped to N/E catch Tank. Approximately 8 gallons of mud and gravel was removed from the pit and poured into a triple poly lined 55 gallon drum. Pit was then hosed down well and squeegees used to push H<sub>2</sub>O to sump pit. All waste was disposed of in proper locations. At 1300 hrs I attended a meeting with V. Briscoe, V. Jorgenson, L. Torgerson, J. Furniss and B. Beatty to discuss contamination level raise in C.T. Pit. Set-up controls for C.T. piping valve retrieval from hot-waste box in Z-II area on RMF. Moved CAM close to work area.

#### **May 7, 1986**

Detailed contamination survey of MTR C.T. pit after decon of 5-6-86. General contamination levels were Z-I at 500-1,500 d/m βγ except for N/E wall and floor area of vault which showed 100,000 d/m βγ and sump pit H<sub>2</sub>O which was 3,400 d/m βγ in deepwell. Ribboned and tagged those areas as Z-III. Changed pit entry tag to Z-I. Contracted carpenter who made a ¾" plywood man-hole cover.

#### **May 12, 1986**

Went to survey area after decon found that everything was too wet for paper survey so we need one in the morning after it is dry.

#### **May 13, 1986**

Surveyed wall and floor of Zone III area in NE vault, Wall smears were <200 d/m βγ and 0 alpha. Floor smears were Zone I levels. Masslinners of both areas were between 5,000 and 10,000 d/m βγ with 2A.

#### **May 13, 1986**

Smeared floor & walls following decon attempt. Floor smears all < 1000 d/m βγ above background. Tanks smear to 1500 d/m above background.

**May 14, 1986**

Smeared tanks and floor following decon attempt. Tanks all checked okay. Found one smear on floor counting 950 d/m  $\beta\gamma$  above background. It will be cleaned again.

Resmeared floor where it smeared 950 d/m  $\beta\gamma$ . Checked okay.

Smeared beams on ceiling where cores are to be drilled. No contamination detected above background.

**May 16, 1986**

Detailed radiation survey made of vault area. 5-180 mr/hr  $\beta\gamma$  at contact with piping (exposed) between vault and valve pit, 30 mr/hr  $\beta\gamma$  GBF at N/E corner of vault from piping. 0.3-5 mr/hr  $\beta\gamma$  GBF in vault. Ribboned entire vault to  $\leq 5$  mr/hr  $\beta\gamma$  GBF. Set-up new radiation signs with map on backside.

Advised B. Baldwin of situation involving D. York (M-K Safety) who questioned H.P. practices at C.T. vault.

**May 19, 1986**

Surveyed instrument airlines as they were unwrapped for connecting flanges and tanks up. No contamination found on airlines or internally. Cleaned-up potentially contaminated fiberglass insulation and garbage in area between C.T. vault and valve pit.

Smeared flanges for hook up. No contamination detected internally or externally.

**May 21, 1986**

Contamination survey of floor and valves after contaminated valves were placed onto tank side flanges. 400-600 d/m  $\beta\gamma$  smearable on valves only. Requested wipe-down again.

**May 27, 1986**

Smeared valves and floor following Friday installation.  $<200$  d/m  $\beta\gamma$  and 0  $\alpha$ .

**May 28, 1986**

Provided coverage for 3 hot tie-ins, including the sump drain from the CT valve pit. As the flange to the drain line was opened approximately 8 gallons of water drained into a plastic bag lined 30 gallon waste container. No contamination spread during the operation. Constant H.P. coverage provided as (3) hot tie-in's to the MTR C.T. valve pit were made. After the 4" drain line from the  $\alpha$  wing/lab's was opened and flanged to the C.T. operation opened a valve to drain existing  $H_2O$  in the lines. Approximately 200 gallons of  $H_2O$  dumped into the catch tank and the 2nd 4" tie-in was made. Preparations for residual  $H_2O$  were made on all tie-downs by taping sleeving to the flanges and funneling  $H_2O$  into a double lined 35 gallon trash



can. The 1st. 4" line tie-in had a small volume approximately 1 pint of H<sub>2</sub>O leak from it and the 2nd 4" tie-in (after draining the existing H<sub>2</sub>O into the C.T) had approx 20 gallons of H<sub>2</sub>O that was funneled into the 35 gallon can. A new can was obtained before tie-in was made to the 3" suction line. The H<sub>2</sub>O which came for the 4" line read 100 mr/hr βγ at 1" from the surface and can read 10-20 mr/hr βγ at contact. After the 3 tie-in's were made the flanges were washed with H<sub>2</sub>O and radiacwash - contamination survey showed 2,800-6,400 d/m βγ and 1 flange had 30 d/m α. No personnel contamination noted and ≤15 mR W/B exposures on SRDs.

**May 29, 1986**

A. Rooks of Atlas Mechanical came into the HPO at 0950 hrs. after having been in C.T. vault and contamination survey on the LAD showed contamination present on his feet, hands and blues of 10,000-50,000 d/m βγ. After deconning his feet and hands plus confiscation his blues, no contamination was detected on LAD but survey with a RM-14 showed particles of 6,000 d/m βγ on his cheek and 4,000 d/m βγ on 1 sideburn. 2 nose swabs taken showed no contamination present. After taking a shower no other contamination was noted. While deconning was being done on A. Rooks, I advised the other 2 Atlas Personnel (J. Harris and B. Marlett) to come the HPO for an immediate survey - both showed no contamination present but only J. Harris had entered the vault. The job foreman (J. Furniss) could not be reached because he had made a trip to CPP for parts or other business. Advised the (3) personnel to remain out of vault until further notice and have job foreman contact myself ASAP. Note: the SWP had been brought into the HPO at approximately 0820 hrs. but had not been completed because I had went to a safety meeting at MTR-653. A written message to J. Furniss had been placed on the HPO chalkboard advising "No entry into the pit until I okayed it" but both J. Furniss and A. Rooks did not see the message when they came into the HPO. After talking to J. Furniss at approximately 1040 hrs. I re-emphasized the need for completion of the SWP and a briefing before entry into the pit due to changing conditions. A. Rooks became contaminated while making repairs to a impact wrench used to secure the flanges of the (2) 4" piping tie-ins. A detailed survey was made of the N/W side of vault which showed Z-II conditions of 3,000-9,000 d/m βγ. Only Z-III level smear was taken on the impact wrench which showed 22,700 d/m βγ, 45 d/m α and 8,000 - 9,000 d/m βγ, 25-30 d/m α on blotter paper where repairs were made. Advised J. Furniss of conditions and completed SWP. Retagged vault ladder as Z-II area in vault. Advised B. Baldwin of conditions at 1300 hrs.

Was advised that J. Harris of Atlas Mechanical had a contaminated foot show-up on α wing LAD. Particle read 8,000 d/m βγ w/RM-14 and was deconned with soap and H<sub>2</sub>O. He stated only job he was involved in since lunch was the tie-in of the 4" durairon drain line from the α building (MTR-641) which extended around the outside of MTR C.T. vault. They had done per H.P. request and wore only gloves to clean-out 4" line of soil when it was broke off during excavation in August of 1985 and were prepared to catch any liquid build-up in the line. Line had been tagged O.O.S. at MTR-641 since 1985. Note: When line was initially opened, drained and removed in 1985 maximum activity detected was 500 c/m γ in deepwell and no spills occurred during removal. I advised all personnel to remain out of area to assess conditions.

Obtained soil sample from bucket used to clean-out γ building drain line and soil around 4" drain pipe. Was surprised to find that sample read 8,000-10,000 c/m βγ w/RM-14. Same as contamination present on J. Harris' shoe. Advised V. Briscoe that conditions had changed and

source was to be identified. I took (7) soil samples in immediate area of 4" drain line extending up to 2" stainless steel drain line from  $\alpha$  hot cell to the HWST farm. After uncovering 2" line with a shovel an obvious bend was observed and soil became more moist around pipe with particles or clumps sloughing off up to 500 m/hr  $\beta\gamma$  at contact with R20-50. Sample (approximately 4 oz) taken around pipe read 100 mr/hr  $\beta\gamma$  w/GM. A survey of soil removed and piled around excavation showed >50,000 d/m  $\beta\gamma$  w/RM-14 mostly on top and south/southwest side of pile was covered with poly sheeting per B. Baldwin's request. Note: A green-tag was issued to the EO for the back-hoe after S. Watt surveyed in the HPO and was not contaminated. He had jumped in the excavation and visually inspected the piping to make sure it was uncovered adequately for tie-in. A phone call was made to CPP where back-hoe is believed to have gone. Request was made for survey of backhoe. A 1 minute count of the soil sample taken right under the pipe showed  $1.23 \times 10^6$  d/m  $\beta\gamma$ , 126 d/m  $\alpha$  (moist) the dry count showed  $1.15 \times 10^6$  d/m  $\beta\gamma$ , 244 d/m  $\alpha$ . The sample counted was a planchett full of soil.

#### **May 30, 1986**

Provided coverage for more hot tie-ins. Four tie-ins contributed 10-15 gallons of water, which was contained in a 30 gallon garbage can with a plastic liner. Tie-ins are now complete. Clean-up will commence next week.

Constant HP coverage provided as contaminated soil excavated during  $\gamma$  building drain line recovery was surveyed, boxed, & then backfilled into hole with approx 1 ft of clean soil placed over contaminated area. Posted, roped, & tagged area. Soil was kept moist with  $H_2O$  during boxing. 5 - 2'x4'x8" boxes were loaded. Soil placed in boxes read 5-40 mr/hr  $\beta\gamma$  at contact with GM. All soil placed back in excavation read 0.5 - 1.5 mr/hr  $\beta\gamma$  at contact. No personnel contamination was noted at job completion. All tools were hosed off at job completion and front-end loader was hosed off continually during job.

#### **June 2, 1986**

Intermittent H.P. coverage provided as Atlas removed tools and equipment from the C.T. vault and Cajun Construction began backfilling and general clean-up of the job site. Atlas double bagged all items removed and the bags were placed in the Z-II on the RMF to wait for decon. Miscellaneous equipment and garbage collected from the job site with non-contaminated items being disposed of into a coldwaste dumpster and contaminated items being disposed of into a 4'x4'x8" non-compactible waste box or the compactible waste dumpster - contaminated items read 8,000 d/m  $\beta\gamma$  w/RM-14 up to 5 mr/hr  $\beta\gamma$  with a GM. Surveyed and issued a G.T. for equipment, stock and tools taken from the RMF welding area. No personnel contamination was noted with 10-30 mr W/B exposures on SRDs.

#### **June 3, 1986**

Intermittent H.P. coverage provided as backfill of MTR C.T. vault job continued. Contamination survey of front end-loader showed 1 area in bucket of 6-8,000 d/m  $\beta\gamma$  w/RM-14. Deconned area and issued G.T. - Loader was rinsed down continually during use in contaminated soil and before survey. Cleaned-up job site of H.P. equipment and supplies. As filling-in progressed I removed the H.P. signs and/or rope as conditions allowed.

#### **June 4, 1986**

Intermittent H.P. coverage provided as back-fill of MTR C.T. vault excavation area continued. Prior to filling the hole next to the  $\alpha$  wing where the TRA hot cell line repairs were made. The area was hosed down to prevent a contamination spread. At start of shift Amcor delivered another 4' manhole pipe piece to go over the vault access ladder. The original piece ordered narrowed down at top to approximately 2' penetration which made entrance difficult and in the event of an injured person accident in vault because rescue equipment would be difficult to maneuver thru the opening. Those observations were told to V. Briscoe who had new pipe ordered on 6/3/86. No personnel contamination detected at shift end.

#### **June 9, 1986**

Intermittent H.P. coverage provided as laborers removed all tools, trash, used anti-C's and equipment from the vault. A 4'x4'x8" box south of the  $\alpha$  wing was used to dispose of contaminated ladder (wood), lumber and trash that was bagged which read up to 2 R/hr  $\beta\gamma$  at contact. Disposed of approximately 50 gallons of contaminated H<sub>2</sub>O from C.T. lines into the vault swamp pit which dumped into the tanks. Blotter paper put around sump pit B-4 dumping and area around sump pit was hosed down due to small amount of spillage. All items retrieved from the vault for decon were placed in the Z-II on RMF after being double bagged. Surveyed and segregated compactible and combustible waste. No personnel contamination noted and  $\leq 15$  mr W/B exposures on SRDs.

#### **June 12, 1986**

Monitored while a construction fitter entered the vault to tighten bolts. Gen field  $< 5$  mr/hr. The SE tank had a hot spot on bottom of approximately 250 mr/hr. Rooks picked up  $< 10$  mrem on his dosimeter.

#### **June 13, 1986**

Advised G. Passmore (H.P.) of conditions in vault for provision of constant H.P. coverage while Snake River Electrical repaired burned conduit and wiring. Constant H.P. coverage required because TRA Hot cells is doing decon and work on Cell #3 which is running liquid into Tank #1. GBF during job was 10-50 mr/hr  $\beta\gamma$  and Z-II anti-C's worn with F/F resp's while setting anchors into north wall. No personnel or equipment contamination noted and 40 mr W/B exposure on SRD to B. Nash (electrician).

#### **June 18, 1986**

Rad-cont. survey from catch tank vault. Tank #1 9 R/hr at middle section. 1 R/h GBF around tank. Rest of area 60-100 GBF area on floor general zone I. Around sump zone II on pipes north.

**June 19, 1986**

Rad survey of catch tanks vault. NE tank 8 Rh after pumping. 800 mrh GBF at middle portion of tank. 1 Rh GBF at bottom. No personnel are allowed in vault until repumping has occurred.

**June 23, 1986**

Tagged and posted MTR catch tank vault entrance - High Rad Zone.

**June 27, 1986**

Surveyed while a sample was taken from the hot catch tank. 100 mr/hr at sample line and bottle read 700 mr/hr at contact. No problems. Took to RML for analysis.

**June 30, 1986**

Surveyed the tanks found GBF generally 150-250 mr/hr and hot spot was NE tank 9R/hr at contact.

**July 11, 1986**

Checked radiation field to last 5 ft. of the entry ladder. Found a maximum of 10 mr/hr.

**July 15, 1986**

Received SWP for fitters to repair air eductor in the CT valve pit. Due to area reading 1-2 r/hr  $\beta\gamma$ , apparently loose contamination, I requested decon of the area prior to entry for repair (I have been reporting the need for decon to R.E. Peterson for 6-8 months.) Also reported stopping the job to Bud Lebsack and R. E. Peterson.

**July 17, 1986**

Continuous coverage of decontamination of valve pit. Job commenced by putting down blotting paper where garbage from pit was to be put in bags. Zone was enlarged to accommodate procedure. Rad survey was performed by lowering an instrument into hole. Readings were 50-75 mr/hr  $\beta\gamma$  2 to 3 ft. from entrance of the hole, 250 mr/hr  $\beta\gamma$  at entrance. 1 R/hr at 3 ft from floor and 2R/hr 6 in. from floor. All readings were  $\beta\gamma$ . Work proceeded by using a hook to pull garbage out of pit. Rad survey on all items pulled out was performed also smears were taken on some things. Readings were: 2 plastic bags reading 75-200 (in places) mr/hr smear was taken on some dirt of one bag and was 20,000 dpm, 1 plastic bag = 1 R/hr at contact  $\beta\gamma$  smear was taken on mildew which was on the bottom of the bag. Smear read 75 mr/hr  $\beta\gamma$  at contact and 6,000,000 dpm. Also shoe cover 1.5 R/hr, grease gun 1 R/hr  $\beta\gamma$ , 2 cinderblocks 4 R/hr  $\beta\gamma$ , Sheet of plywood 75 mr/hr. Area was then washed down with water for about 2 hrs. Again readings were taken: opening 175 mr/hr  $\beta\gamma$  3 ft. 1 R/hr  $\beta\gamma$  750 mr/hr  $\gamma$  6 in was 2-3 R/hr  $\beta\gamma$  and 1 R/hr.  $\gamma$ . Also masslinn was taken which read 150 mr/hr  $\beta\gamma$  area was cleaned up lid put back on area smeared with results of 1 smear at 2000 dpm. Most smears were fairly clean. Problem was reported and given to higher authorities.

Surveyed valve pit for possible decon and eductor repair entries. General body field throughout pit is 500-750 mr/hr  $\gamma$ . A few spots read 2-3 R/hr where debris appears to be holding contamination. The working field by the eductor is 500 mr/hr  $\gamma$ . The drain sump appears open and clean and reads 750 mr/hr  $\gamma$ . Berrett picked up approximate 25 mrem on dosimeter in approximately 5-7 minutes in the pit. No personnel contamination detected upon job completion.

**July 22, 1986**

HP coverage while decon was performed on pits. 2 men worked for approx 20-30 min and both received 160 mr/hr to dosimeters. 1 bag was taken out containing pieces of rust and also garbage bag had 1.5 R/h. Survey was performed after lunch. Body fields stayed the same body fields were 300-750 mr/hr (3 ft above the floor) and also one pipe was reading approx 4 R/hr at contact. Contamination levels were in the ??? ??? smear was 2,500,000 dpm  $\beta\gamma$  and 13,200 dpm  $\alpha$  and 50,000 dpm  $\beta\gamma$  and 100 dpm  $\alpha$  still high radiation and high contamination. Both yard men will have the badge pulled tonight and results tomorrow. Results from yesterday I recieved 0/68 Windberg 48/151 and lower leg 540 mr/hr Gunderson 0/161 and lower leg 422 mr J Larson 55/168 and lower leg 401 mr/hr area then was cleaned up and will pass on to higher level

**August 11, 1986**

Constant H.P. coverage provided as MTR catch tank #3 was transported from bone yard to HWST valve pit. Tygon tubing was run from tank to sump pit for draining  $H_2O$  from tank. Welder wore F/F resp. while penetrating tank thru pipe nipple with portable HEPA filter unit creating negative pressure on tank. Tank read 400 mr/hr  $\beta\gamma$  max at contact. GBF was 30-40 mr/hr  $\beta\gamma$ , drain hose read 5-10 mr/hr  $\beta\gamma$  at contact, after draining approximately 3" of sludge remained in tank bottom. 3 jars of sludge were dipped from tank bottom, samples read 30, 40 and 150 mr/hr  $\beta\gamma$  at contact.  $\leq 20$  mr W/B exposures to personnel - 2 personnel had contamination on arm or hand - removed with soap and  $H_2O$ .

**August 12, 1986**

Constant H.P. coverage and assistance provided as MTR catch tank #2 was transported to HWST valve pit tapped, drained and sludge sampled. C.T.s #1 and #4 were only transferred and drained. No samples taken due to high winds. CT #2 read 1.5 r/hr  $\beta\gamma$  at contact with bottom, 50 mr/hr  $\beta\gamma$  GBF at 6 feet. 200 mr/hr  $\beta\gamma$  GBF on tank top while sampling sludge, 40 mr/hr  $\beta\gamma$  max at contact with drain hose, 500 mr/hr  $\beta\gamma$  at back with samples. CT #1 read 1-2 R/hr  $\beta\gamma$  at contact with bottom, 35 mr/hr  $\beta\gamma$  GBF at 6 ft., tank read 500 mr/hr  $\beta\gamma$  at bottom after draining  $H_2O$ , 100 mr/hr  $\beta\gamma$  at nose, no sludge samples taken. C.T. #4 read 2.5 R/hr  $\beta\gamma$  at contact with bottom, 80 mr/hr  $\beta\gamma$  GBF at 6 feet, 150-400 mr/hr  $\beta\gamma$  seen at contact with hose. No sludge samples taken. After removing gate valve and drain hose a piece of cloth like debris was hanging from pipe nipple and contaminated  $H_2O$  was blowing on personnel from high winds - All personnel deconned in HPO with soap and  $H_2O$ . Maximum detectable contamination with 2A was 300,000 d/m  $\beta\gamma$ . General work area and soil was scraped-up and disposed of. Valve used for job area 150 mr/hr  $\beta\gamma$  at contact and was disposed of in non-comp. waste box. M. Wilk was present during job.

## **Appendix D**

### **Pipeline and Process Water Concentrations Related to TRA-603/605**

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## INTEROFFICE CORRESPONDENCE

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Date: November 15, 1993

To: K. J. Holdren, MS 2110

From: H. K. Peterson, MS 2110 *H. K. Peterson*

Subject: PROCESS WATER CONCENTRATIONS AND ACTIVITY LEVELS IN THE MATERIAL TEST REACTOR PROCESS WATER SYSTEM - HKP-14-93

As requested, the Material Test Reactor (MTR) process water (PW) analysis log has been reviewed and the analysis values in c/m/ml tabulated in the log have been converted to pCi/l and distributed among the radionuclides that were responsible for the activity. The data for the 19 months covered by the log is summarized in Table 1. Since the "deep well" data of the PW log was determined with a counter nearly exactly the same as is being used at the Advanced Test Reactor (ATR), today, the efficiency of the ATR "deep well" counter (60%) was used in the conversion of the c/min/ml values to the pCi/ml. In the front cover of the PW log, a note reads:

"When deep well counter is out of order dry 1 ml of PW in a watch glass and count in Hot Box. Multiply Hot Box reading by (4) to compare with deep well reading."

The above statement, assuming the deep well counter to be 60% efficient, implies that the Hot Box counter had an efficiency of about 15%, which is a reasonable value for "watch glass" samples and the type counter that would have been used to count those samples. Therefore, the average PW  $\beta$ - $\gamma$  reading of 43,720 c/m/ml from Table 1 is equivalent to  $3.28\text{E}+7$  pCi/l and the corresponding average  $\alpha$  reading of 0.469 c/m/ml is equivalent to  $1.41\text{E}+3$  pCi/l.

Radioactivity levels in a reactor coolant system are due to activation of contaminating materials in the primary coolant; activation of structural materials that are corroded, entrained in the primary coolant, and brought into the flux region where activation occurs; by release of fission products due to fuel clad imperfections, breaches, or ruptures; and are due, in small part, to "tramp uranium" that contaminates the fuel clad outer surface during the manufacture of the fuel assembly. R. L. Heath describes these contaminating mechanisms in Ref. 1 for several reactor/experimental loop constructions. For a system such as the MTR, the Engineering Test Reactor (ETR), or the ATR where the fuel is clad with aluminum, the reactor internals and the primary coolant system are constructed of stainless steel, and the reactor is cooled with regular, demineralized water, the greater majority of the coolant activity with a decay of 2 to 24 hours is due to N-16 and Na-24. Each of these components reaches an equilibrium value within a couple minutes, in the case of N-16, and within a couple of days in the case of Na-24, and

each of these equilibrium values is directly proportional to the power level of the reactor. Because the magnitudes of these activities are so large with respect to the other anticipated activities, it is the activity levels of these radionuclides and the high energy  $\gamma$  associated with them that govern the shielding design of the reactor coolant system. Because these components are so radiologically dominating with their  $\gamma$  fields, other minor components that may be introduced into the primary coolant system were, before the present state of  $\gamma$  spectroscopy was developed, difficult to detect for samples with short decay times simply because the detector was "swamped" with the interactions of the predominant, high energy  $\gamma$ . In the MTR, the ETR, and in the ATR, fission break monitors were installed that monitored small side streams of the primary coolant that exited each of the fuel elements or experimental facilities. By taking this side stream at the exit point of the fuel assembly before mixing occurred with the remaining volume of the primary coolant system, concentration of fission products was maximized and determination of the offending/affected fuel element could be assured.

Since the predominant amount of the normally present, base activity is directly proportional to the power level of the MTR reactor, the literature was reviewed to locate reports that would allow the gross activity to be distributed among the respective specific radionuclides of the PW. Quoting from Ref. 1:

"Since the gross activity in the water stream is due to the presence of many activities with widely different half-lives, the character of the radiation emitted by the radioactive materials in the water will be related to the elapsed time since removal from the flux region. To permit examination of the short-lived activities in the MTR process water stream, a sample line was installed to provide water with a minimum delay of 10 seconds from the reactor core. A water chamber (approximate volume of 500 cc) was installed on this line and the gross water activity observed with a  $1\frac{1}{2}$ " x 1" NaI (Tl) detector. The output from this detector was observed with an automatic recording single-channel  $\gamma$  scintillation spectrometer. This method of observation permitted study of the  $\gamma$  spectra of the radiation emitted by the various water activities. Variation of the delay time from the core was utilized to provide half life determination.

"At short times (up to a few minutes) after removal from the flux region, the major activities which have been found to be characteristic of an MTR type aluminum system are 7-second  $N^{16}$ , 2.4-min.  $Al^{28}$ , 2.6 hr.  $Mn^{56}$ , and 15-hr.  $Na^{24}$ . Figure 1 [attached for reference] shows the  $\gamma$  pulse spectrum obtained from a water source approximately 10 seconds out of the high flux region of the MTR. This pulse distribution is essentially that of the 6.1 Mev  $\gamma$  ray of  $N^{16}$ , indication that this activity is the major contributor at short delay times.



"The character of the  $\gamma$  spectrum following the decay of  $N^{16}$  is shown in Figure 2, [attached for reference]. Two major  $\gamma$  rays of 1.38 and 2.76 Mev identify the major activity in the time region from 2 to 24 hours as  $15\text{ hr. Na}^{24}$ . The pulse spectrum of pure  $Na^{24}$  is shown in Figure 3 [also attached for reference] for comparison. The levels of  $Na^{24}$  activity were observed to remain constant, dependent only on reactor power level, and may be accounted for largely by the n- reaction occurring in the aluminum present in the reactor core. Thus, if sufficient time delay is inserted to allow for the decay of the  $N^{16}$  activity, it would appear that the production of the  $Na^{24}$  constitutes a major background problem in high flux reactors using Aluminum clad fuel. All spectral studies of long lived activities were obtained from batch samples with a laboratory  $\gamma$  spectrometer."

The referenced document (Ref. 1) also describes all of the problems involved with monitoring the MTR PW system for fission product monitoring that was developed for detecting fuel element cladding breaches/ruptures, i.e., fission breaks. This report defines the MTR PW activity in qualitative terms, but does not provide quantitative data for the percentage of the respective radionuclides.

In order to determine the reactor operating level during the 19-month period covered by the PW log, the MTR cycle reports for cycles 208, beginning on 4/27/64, through cycle 234, beginning on 11/8/65 and ending on 11/29/65, were reviewed. During the 19 month period of 1964 and 1965, the maximum power level of the reactor was generally 40 MW, with the average power level, calculated over the period of operation, being 37.5 MW and never less than 22.2MW. During this 19-month period there were three fission breaks, detected by the fission break monitoring system. These caused the reactor to shut down or be shut down. The reactor was shut down when a fission break was detected because the plateout of fission products on the reactor internals caused increased  $\beta$  and  $\gamma$  fields that raised personnel exposures during in-tank operations during the shutdown. These fission breaks occurred on 12/8/64, during cycle 218; on 3/11/65, during cycle 222; and on 4/16/65, during cycle 224. The data from these cycle reports is summarized in Table 2. Data presented in Table 2 show that the reactor operated in a relatively trouble-free operation at a relatively constant power level for the time period in question.

Prior to, and during, the shutdown period following a fission break, the PW demineralizers and degassification system were used to clean fission products from the PW system prior to in-tank operations.

Since no quantitative data for the MTR PW radionuclide distributions could be located, the ATR radionuclide activity distributions were used, since the two reactors and coolant systems are so similar, i.e., ATR and MTR both used

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aluminum-clad fuel and used coolant water demineralized and cleaned with the same system. A sample of ATR PW, collected on 11/16/93 and counted at the Radiation Measurements Laboratory (RML) two hours later shows the  $\gamma$  spectrometer analysis of Table 3. The radionuclide distribution of the ATR analytical results translated to the average MTR PW count rate data is provided in the last column of Table 3.

Table 3 MTR values should not be read as "the radionuclides and respective definite quantities" but rather "the type of nuclides and a representative value for that type of radionuclide." This table compares very favorably with the qualitative table, Table I, (Ref. 1), where R. L. Heath presents the activation and corrosion products detected in the MTR PW water. Table I of Ref. 1 is attached for comparison.

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Attachments:  
As Stated

cc: W. E. Harrison, MS 2110  
L. N. Peterson, MS 2110 *LN*  
Central Files, MS 1651  
H. K. Peterson Letter File

Table 1. Average Monthly PW Activity Levels for the Period of May, 1964, Through November, 1965.

| Month   | c/min/ml   |       |
|---------|------------|-------|
|         | beta-gamma | alpha |
| 5/64    | 48,895     | 0.462 |
| 6/64    | 47,404     | 0.684 |
| 7/64    | 45,065     | 0.787 |
| 8/64    | 45,359     | 0.35  |
| 9/64    | 42,402     | 1.668 |
| 10/64   | 47,250     | 0.668 |
| 11/64   | 51,099     | 0.422 |
| 12/64   | 41,965     | 0.324 |
| 1/65    | 43,580     | 0.28  |
| 2/65    | 44,178     | 0.324 |
| 3/65    | 38,340     | 0.296 |
| 4/65    | 39,913     | 0.27  |
| 5/65    | 47,279     | 0.34  |
| 6/65    | 44,585     | 0.32  |
| 7/65    | 37,119     | 0.316 |
| 8/65    | 41,172     | 0.37  |
| 9/65    | 43,410     | 0.32  |
| 10/65   | 39,434     | 0.338 |
| 11/65   | 42,235     | 0.274 |
| Average | 43,720     | 0.469 |

Table 2. SUMMARY OF MTR CYCLE REPORT FOR THE PERIOD 4/27/64 THROUGH 11/29/65

| Cycle # | Cycle Start/End Dates | Cycle Power MWD | % of MPO* | Max. Power (MW)<br>Avg. Power (MW) | Comments                                                             |
|---------|-----------------------|-----------------|-----------|------------------------------------|----------------------------------------------------------------------|
| 208     | 4/27/64-5/18/64       | 693             | 82.5      | 40/38.8                            | No unusual occurrences (NUO)                                         |
| 209     | 5/18-6/8              | 627             | 74.6      | 40/37.9                            | NUO                                                                  |
| 210     | 6/8-6/29              | 653             | 77.7      | 40/38.6                            | NUO                                                                  |
| 211     | 6/29-7/20             | 627             | 74.6      | 40/38.1                            | NUO                                                                  |
| 212     | 7/20-8/10             | 615             | 73.2      | 40/37.3                            | Low $\Delta P$ on fuel element in L-31 position                      |
| 213     | 8/10-8/30             | 704             | 84.1      | 40/39.5                            | NUO                                                                  |
| 214     | 8/30-9/21             | 661             | 78.4      | 40/38.1                            | Increase in PW $\alpha$ count due to U-235                           |
| 215     | 9/21-10/11            | 709             | 84.6      | 40/39.6                            | NUO                                                                  |
| 216     | 10/11-11/2            | 630             | 74.8      | 40/36.5                            | Low $\Delta P$ on L-27 fuel element; debris found                    |
| 217     | 11/2-11/30            | 962             | 85.9      | 40/39.3                            | NUO                                                                  |
| 218     | 11/30-12/21           | 639             | 76.1      | 40/38.5                            | Fission break (FB) in GEH-4-108 (Pu-Zr); rem.                        |
| 219     | 12/21-1/18/65         | 948             | 84.6      | 40/37.0                            | $\Delta P$ scram due to debris found in L-14 fuel element (FE)       |
| 220     | 1/18-2/8              | 678             | 80.7      | 40/39.1                            | NUO                                                                  |
| 221     | 2/8-3/1               | 600             | 71.4      | 40/36.2                            | Debris found in PW bypass strainer                                   |
| 222     | 3/1-3/22              | 608             | 72.4      | 40/37.1                            | MTR Building Evacuation for 15 hrs due to UO <sub>2</sub> Experiment |
| 223     | 3/22-4/12             | 677             | 80.6      | 40/38.3                            | Poison Section clad failure on Be-5 shim                             |
| 224     | 4/12-5/3              | 648             | 77.1      | 40/22.2                            | Clad failure on Be-4 shim; FB due to Experiment                      |
| 225     | 5/3-5/23              | 709             | 86.6      | 40/39.3                            | NUO                                                                  |
| 226     | 5/23-6/14             | 685             | 79.7      | 40/35.8                            | Reactor was shut down due to experiment # GA-11-1 activity           |
| 227     | 6/14-7/6              | 761             | 86.5      | 40/38.2                            | Debris found on PW bypass strainer                                   |
| 228     | 7/6-7/26              | 611             | 76.4      | 40/37.1                            | NUO                                                                  |
| 229     | 7/26-8/17             | 700             | 79.5      | 40/37.8                            | NUO                                                                  |
| 230     | 8/17-9/7              | 789             | 93.9      | 40/39.5                            | NUO                                                                  |
| 231     | 9/7-9/27              | 708             | 88.5      | 40/39.6                            | Main blended water header leak; repaired                             |
| 232     | 9/27-10/18            | 620             | 73.8      | 40/36.2                            | NUO                                                                  |
| 233     | 10/18-11/8            | 684             | 81.4      | 40/38.6                            | $\Delta P$ problem in L-11 FE position; no blockage                  |
| 234     | 11/8-11/29            | 706             | 84.0      | 40/37.3                            | NUO                                                                  |

MPO = % of maximum possible operation

MWD = mega watt days

Table 3. ATR PW Radionuclide Activities and MTR Estimated Quantities

| Radionuclide | Sample Activity<br>( $\mu\text{Ci}/\text{ml}$ ) | Radionuclide percentage | % error | MTR PW<br>( $\text{pCi}/\text{l}$ ) |
|--------------|-------------------------------------------------|-------------------------|---------|-------------------------------------|
| Na-24        | 2.398E-2                                        | 41.96                   | 0.46    | 1.38E+7                             |
| Ar-41        | 5.372E-3                                        | 9.4                     | 1.48    | 3.08E+6                             |
| Cr-51        | 5.083E-3                                        | 8.89                    | 2.13    | 2.92E+6                             |
| Mn-56        | 1.098E-3                                        | 1.92                    | 3.05    | 6.30E+5                             |
| Co-56        | 6.258E-4                                        | 1.09                    | 1.92    | 3.58E+5                             |
| Sr-91        | 1.107E-4                                        | 0.19                    | 18.41   | 5.90E+4                             |
| Sr-92        | 1.437E-4                                        | 0.25                    | 17.55   | 8.20E+4                             |
| Mo-99        | 2.335E-3                                        | 4.09                    | 0.93    | 1.34E+6                             |
| Tc-99m       | 2.997E-3                                        | 5.24                    | 0.93    | 1.72E+6                             |
| In-116m      | 1.463E-2                                        | 25.6                    | 1.48    | 8.40E+6                             |
| Xe-135       | 1.952E-4                                        | 0.34                    | 5.13    | 1.12E+5                             |
| W-187        | 1.743E-4                                        | 0.30                    | 34.75   | 9.84E+4                             |
| Re-188       | 4.087E-4                                        | 0.72                    | 12.17   | 2.36E+5                             |

## REFERENCES

1. Fission Product Monitoring in Reactor Coolant Streams, by R. L. Heath, January 1, 1956, IDO-16213.
2. MTR Progress Report Cycle No. 208, April 27, 1964 - May 18, 1964, June 12, 1964, IDO-17001.
3. MTR Progress Report Cycle No. 209, May 18, 1964 - June 8, 1964, July 6, 1964, IDO-17013.
4. MTR Progress Report Cycle No. 210, June 8, 1964 - June 29, 1964, July 27, 1964, IDO-17020.
5. MTR Progress Report Cycle No. 211, June 29, 1964 - July 20, 1964, August 19, 1964, IDO-17031.
6. MTR Progress Report Cycle No. 212, July 20, 1964 - August 10, 1964, September 9, 1964, IDO-17033.
7. MTR Progress Report Cycle No. 213, August 10, 1964 - August 30, 1964, September 29, 1964, IDO-17041.
8. MTR Progress Report Cycle No. 214, August 30, 1964 - September 21, 1964, October 15, 1964, IDO-17046.
9. MTR Progress Report Cycle No. 215, September 21, 1964 - October 11, 1964, November 9, 1964, IDO-17051.
10. MTR Progress Report Cycle No. 216, October 11, 1964 - November 2, 1964, December 14, 1964, IDO-17053.
11. MTR Progress Report Cycle No. 217, November 2, 1964 - November 30, 1964, January 6, 1965, IDO-17062.
12. MTR Progress Report Cycle No. 218, November 30, 1964 - December 21, 1964, January 26, 1965, IDO-17066.
13. MTR Progress Report Cycle No. 219, December 21, 1964 - January 18, 1965, February 26, 1965, IDO-17072.
14. MTR Progress Report Cycle No. 220, January 18, 1965 - February 8, 1965, March 16, 1965, IDO-17079.
15. MTR Progress Report Cycle No. 221, February 8, 1965 - March 1, 1965, March 31, 1965, IDO-17085.
16. MTR Progress Report Cycle No. 222, March 1, 1965 - March 22, 1965, April 19, 1965, IDO-17091.
17. MTR Progress Report Cycle No. 223, March 22, 1965 - April 12, 1965, May 11, 1965, IDO-17094.
18. MTR Progress Report Cycle No. 224, April 12, 1965 - May 3, 1965, June 2, 1965, IDO-17098.
19. MTR Progress Report Cycle No. 225, May 3, 1965 - May 23, 1965, June 21, 1965, IDO-17101.
20. MTR Progress Report Cycle No. 226, May 23, 1965 - June 14, 1965, July 9, 1965, IDO-17108.
21. MTR Progress Report Cycle No. 227, June 14, 1965 - July 6, 1965, August 6, 1965, IDO-17113.
22. MTR Progress Report Cycle No. 228, July 6, 1965 - July 26, 1965, August 20, 1965, IDO-17116.
23. MTR Progress Report Cycle No. 229, July 26, 1965 - August 17, 1965, September 8, 1965, IDO-17119.
24. MTR Progress Report Cycle No. 230, August 17, 1965 - September 7, 1965, October 4, 1965, IDO-17124.
25. MTR Progress Report Cycle No. 231, September 7, 1965 - September 27, 1965, October 22, 1965, IDO-17133.
26. MTR Progress Report Cycle No. 232, September 27, 1965 - October 18, 1965, November 17, 1965, IDO-17136.

27. MTR Progress Report Cycle No. 233, October 18, 1965 - November 8, 1965, December 6, 1965, IDO-17137.
28. MTR Progress Report Cycle No. 234, November 8, 1965 - November 29, 1965, December 30, 1965, IDO-17143.

TABLE I

MTR Process Water Activities (Corrosion)

| <u>Nuclide</u>    | <u>Half Life</u> | <u>Concentration</u>   | <u>Method of Production</u>                                                                                                    |
|-------------------|------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| N <sup>16</sup>   | 7.3 sec.         | major<br>(> 1 min.)    | O <sup>16</sup> (n,p)                                                                                                          |
| Al <sup>26</sup>  | 2.3 min.         | major<br>(> 10 min.)   | Al <sup>27</sup> (n,γ)                                                                                                         |
| Mg <sup>27</sup>  | 9.6 min.         | minor                  | Mg <sup>26</sup> (n,γ)<br>Al <sup>27</sup> (n,p)                                                                               |
| Mn <sup>56</sup>  | 2.6 hr.          | minor                  | Mn <sup>55</sup> (n,γ)                                                                                                         |
| F <sup>18</sup>   | 1.9 hr.          | trace                  | O <sup>18</sup> (p,n)                                                                                                          |
| Na <sup>24</sup>  | 15 hr.           | major<br>(> 1.0 hr)    | Na <sup>23</sup> (n,γ)<br>Al <sup>27</sup> (n,γ)<br>Mg <sup>24</sup> (n,p)<br>Cu <sup>63</sup> (n,γ)<br>Zn <sup>64</sup> (n,p) |
| Cu <sup>64</sup>  | 12.8 hr.         | minor                  | Cd (n,γ)                                                                                                                       |
| Cd <sup>115</sup> | 2.3 day          | variable<br>(see text) | Cr (n,γ)<br>Ni (n,γ)<br>Cu (n,p)<br>Fe (n,γ)<br>Ni (n,p)<br>Co (n,γ)                                                           |
| Cr <sup>51</sup>  | 32 day           | minor                  |                                                                                                                                |
| Ni <sup>65</sup>  | 2.6 hr.          | trace                  |                                                                                                                                |
| Fe <sup>59</sup>  | 45 day           | minor                  |                                                                                                                                |
| Co <sup>58</sup>  | 71 day           | trace                  |                                                                                                                                |
| Co <sup>60</sup>  | 5.0 yrs.         | major<br>(> 10 days)   |                                                                                                                                |



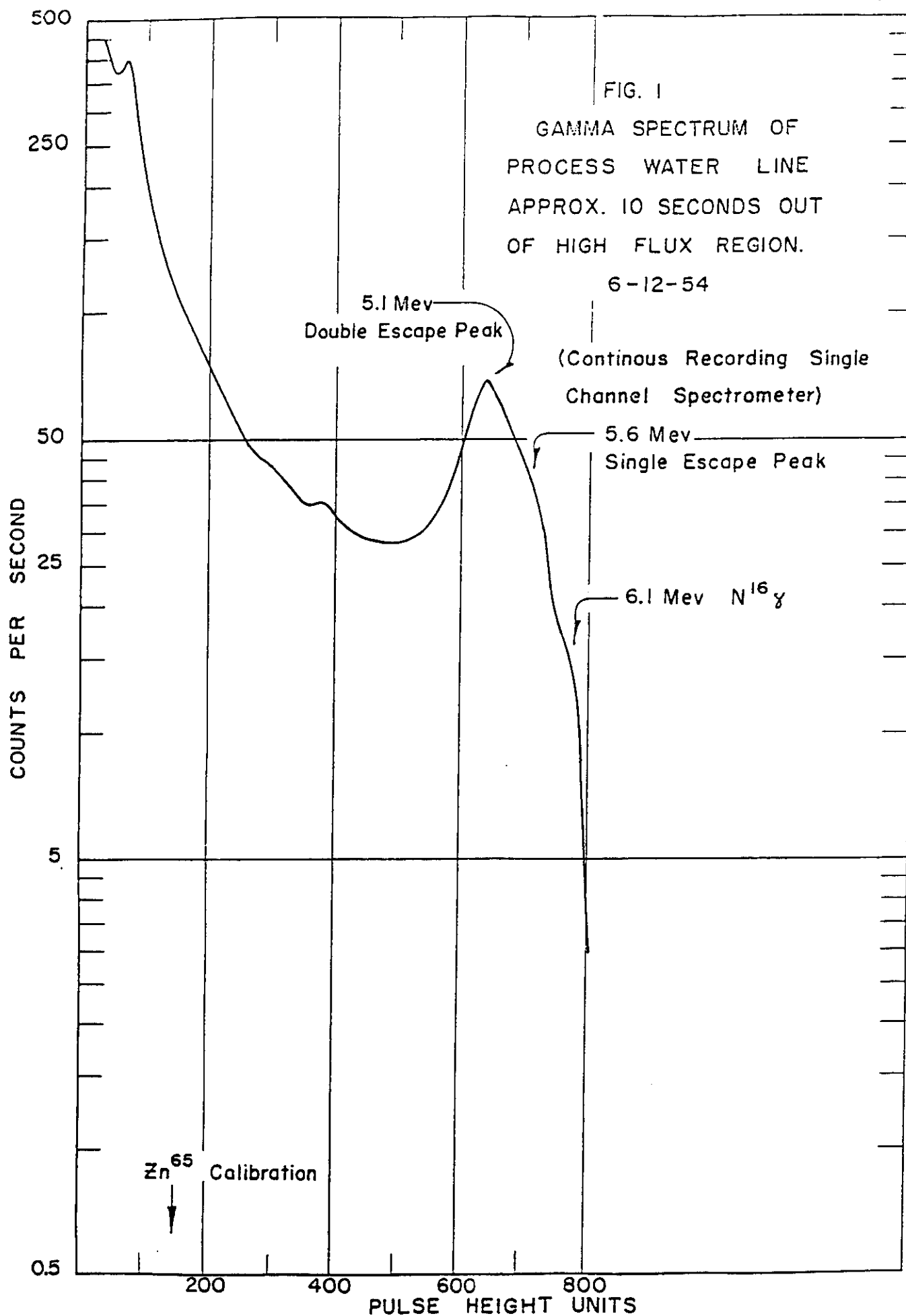
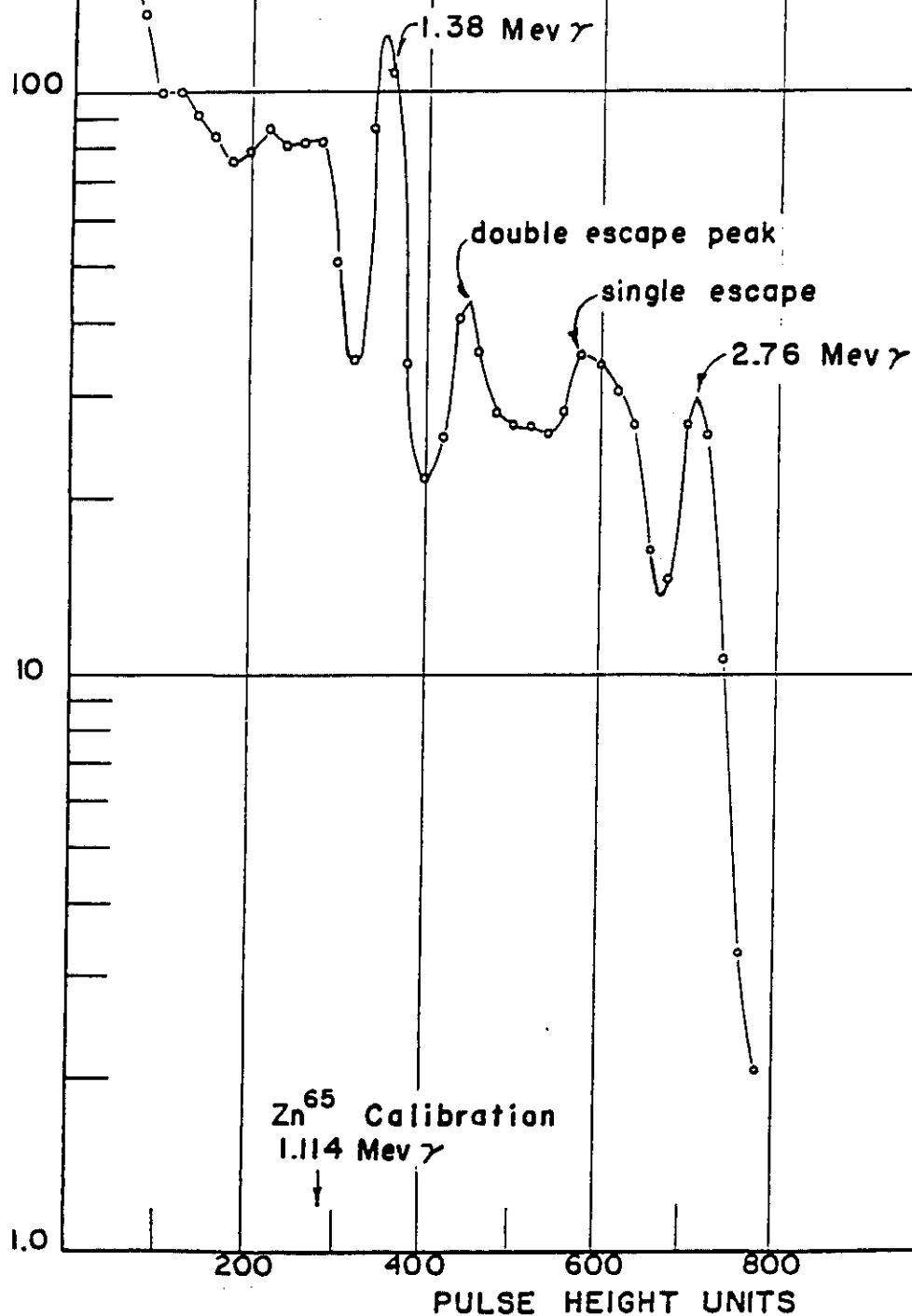
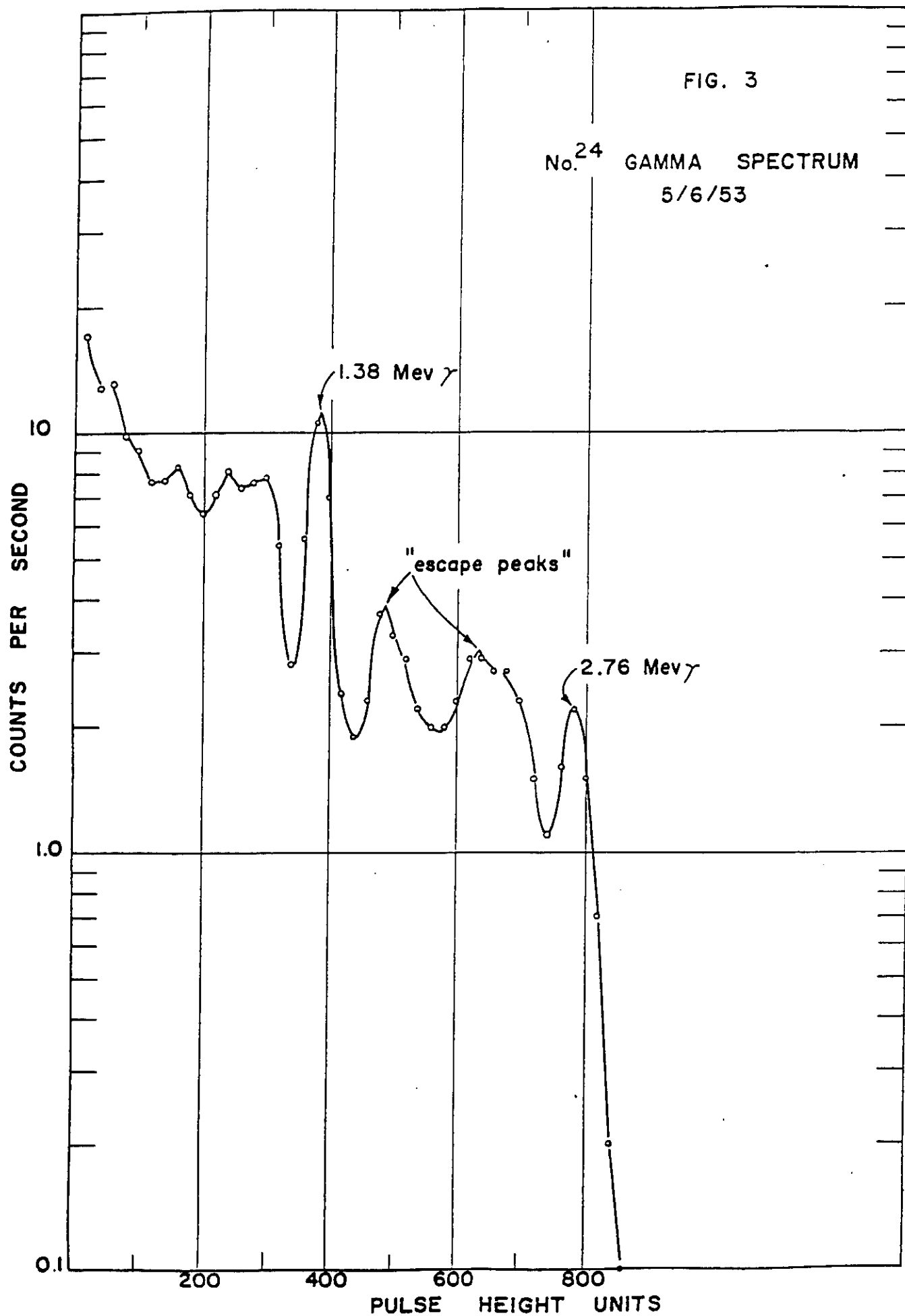


FIG. 2  
GAMMA SPECTRUM OF  
PROCESS WATER SAMPLE  
2 HOURS AFTER REMOVAL  
FROM STREAM.

3-3-53

COUNTS PER SECOND





## **Appendix E**

### **Scope of Work for Operable Unit 2-05 Track 2 Investigation**

## **Appendix E**

### **Scope of Work for Operable Unit 2-05 Track 2 Investigation**

#### **1. INTRODUCTION AND INITIAL EVALUATION**

This Track 2 Scope of Work (SOW) addresses Operable Unit (OU) 2-05 and summarizes the Track 2 investigation. It is based on the preliminary scoping performed for the OU. Track 2 scoping meetings for OU 2-05, between representatives of the U. S. Department of Energy, Idaho Operations Office; the Environmental Protection Agency, Region 10; and the State of Idaho Department of Health and Welfare, Division of Environmental Quality were held January 12 - 13, 1993. To begin the Track 2 scoping process for OU 2-05 it was necessary to define the operable unit. Therefore, the definitions for each site in the OU are given below.

**TRA-15, TRA Hot-Waste Tanks #2, #3, #4.** Site TRA-15 is defined as subsurface soil contamination resulting from a known leak from Tank #1. The vertical extent of contamination is the basalt/alluvium interface.

**TRA-16, TRA Inactive, Radioactively Contaminated Tank at TRA-614.** Site TRA-16 is defined as the abandoned, 300-gallon, underground tank, the associated piping within the vicinity of the tank, and any environmental contamination resulting from tank operations.

**TRA-19, TRA Radioactive Tanks #1 and #4 at TRA-630.** Site TRA-19 is defined as any environmental contamination resulting from releases associated with four tanks removed from the site in 1985 and 1986.

**TRA-603/605, Warm-Waste Sump Tank.** Site TRA-603/605 tank is defined as any environmental contamination associated with the 300 ft of piping comprising the Materials Test Reactor (MTR) warm-waste sump tank, during its operating history as a storage tank and as reactor, primary cooling water piping.

The scope of the Track 2 investigation is limited to the OU as defined above, which is essentially issues associated with tank leaks. Other contamination known or suspected to exist in the area of the tanks at TRA-15 and TRA-19 will be evaluated separately from the tanks as potential new sites under the Federal Facility Agreement and Consent Order.<sup>1</sup> To ensure worker safety is adequately addressed, samples will be collected during the Track 2 Investigation to evaluate the radioactive contamination present at the surface at TRA-15, but not related to tank leaks. The scope of the Track 2 evaluation, exposure pathways, and contaminants of concern, as defined during the scoping meetings, are given in Sections 3, 4, and 5 below.

## 2. SITE HISTORY AND DESCRIPTION

Test Reactor Area (TRA) OU 2-05 consists of four sites: TRA-603/605 Tank, TRA-15 (TRA Hot-Waste Tanks #2, #3, #4 at TRA-713), TRA-16 (TRA Inactive, Radioactively Contaminated Tank at TRA-614), and TRA-19 (TRA Rad Tanks #1 and #4 at TRA-630 replaced by Tanks #1, #2, #3, and #4.). All of the sites, with the exception of TRA-16, are associated with the Materials Testing Reactor (MTR) complex. The MTR, a 40-megawatt, light water, fuel and materials testing reactor began operating in 1952 and was deactivated in 1970. The reactor operated on highly enriched uranium, except during special cycles when plutonium fuel was used.<sup>2</sup> A more complete description of each of the sites can be found in the Track 2 scoping tables.

## 3. SCOPE OF PROJECT

**TRA-15, TRA Hot-Waste Tanks #2, #3, #4.** TRA-15 will be sampled to characterize potential contamination from the known leaking of Tank #1. Sampling will be performed in accordance with a sampling and analysis plan that will have been reviewed by the DOE-ID, EPA, and IDHW. Characterization data will be validated, a risk evaluation in accordance with the Track 2 guidance performed based on the analytical data, and the findings compiled in a summary report. The risk characterization and summary report will be performed and prepared in accordance with the latest revision of the Track 2 guidance document.

**TRA-16, TRA Inactive, Radioactively Contaminated Tank at TRA-614.** The preliminary scoping for TRA-16 indicates that no source is likely to exist at the site because the tank is not believed to have leaked. To verify this, the tank is to be removed by the EG&G Idaho, Inc. Tank Management Program (TMP), in accordance with approved procedures. The excavated area will be tested for the presence of contamination using portable radiation detection devices. Samples will be collected from the excavation after tank removal. Following data validation, sample data will be used to determine potential or actual risks from the site and to recommend future action.

**TRA-19, TRA Radioactive Tanks #1 and #4 at TRA-630.** The Track 2 investigation will be limited to collecting documentation such as health physics logbooks, sampling results, and facility change documentation to further verify the absence of contamination from a tank leak. A summary report, based on the information collected, will be prepared in accordance with the Track 2 guidance.

**TRA-603/605, Warm-Waste Sump Tank.** The Track 2 investigation will be limited to collecting information on the contaminants of concern present and compiling evidence on the condition of the piping or leaks that may have occurred. If inadequate historical information is available to determine if the piping leaked, a limited field investigation such as gas tracer test on the system will be conducted. A preliminary risk evaluation, based on the evidence collected, will be performed and documented in the summary report for the OU.

## 4. CONCEPTUAL MODEL

If sufficient contamination has occurred, there are a number of exposure pathways are of concern. The groundwater ingestion pathway, using the residential scenario, is potentially complete for all four sites in OU 2-05. The inhalation of volatile organic compounds, contaminated fugitive dust, and the ingestion of contaminated soil are possible using the future residential scenario at site TRA-16. The external exposure pathway for radioactive contaminants at TRA-16 is also complete using the future residential scenario as well as the current occupational scenario.

## 5. PRELIMINARY DATA QUALITY OBJECTIVES FOR OU 2-05

### TRA-15, TRA Hot-Waste Tanks #2, #3, #4

**Objectives.** For TRA-15 the objectives are to collect adequate sampling and analysis data to determine if the contents of Tank #1 leaked into the soil below the concrete basin, identify the contaminants of concern and their potential concentrations, and make a preliminary estimate of the extent of contamination.

**Data Uses.** The data will be used for site characterization and a evaluation of risk in accordance with the Track 2 guidance.

**Contaminants of Concern.** Preliminary contaminants of concern were identified from a gamma spectrometry analysis of the contents of Tank #4 in 1991. It is assumed that the contents of Tank #1 at the time of leakage contained the same radionuclides. However, it is also possible that additional radionuclides were present, including transuranics and other mixed fission products from reactor and laboratory operations. The catch tanks also received laboratory wastes. Therefore, it is suspected that nonradioactive organic and inorganic chemicals (e.g., solvents and acids) were present in Tank #1 at the time of the leakage.

**Risk-Based Level of Concern.** The risk-based levels of concern (the lowest level identified from all pathways evaluated) for the radionuclides are:  $^{137}\text{Cesium}$  -  $9.0\text{E-}02$  pCi/g,  $^{60}\text{Cobalt}$  -  $2.1\text{E-}02$  pCi/g,  $^{154}\text{Europium}$  -  $4.4\text{E-}02$  pCi/g, and  $^{90}\text{Strontium}$  -  $3.4 \text{E+}06$  pCi/g. Risk-based levels of concern will be determined for all contaminants of concern, as they are identified.

**Pathway of Concern.** See Section 3 above.

**Media of Concern.** The media to be sampled during the investigation is soil.

**Sampling Methods and Procedures.** A 24-in. California split spoon, in conjunction with a hollow-stem auger, will be used to collect samples from three boreholes located around the tank basins. Discrete samples will be collected from 2-ft intervals every 4 ft, beginning at 15 ft below ground surface to the basalt/alluvium interface in the boreholes located 5 ft from the french drain and west of the concrete basin. Sampling in the borehole located east of the concrete basin will be the same, except the intervals will begin 1 ft below the surface and a discrete surface sample will be collected at that location as well. The samples collected from the surface to 15 ft at this

location will be used as preliminary scoping data for radioactive contamination in the area that is not believed to be related to the leaking of Tank #1. For the same reason, if field screening at the other boreholes indicate contamination above the 15-ft depth, samples will be taken for laboratory analysis.

**Background and Critical Samples.** No background samples will be necessary because background concentrations have been established for the Test Reactor Area.<sup>3</sup> Critical samples will be defined in the sampling and analysis plan.

**Analytical Level.** Field screening done with portable instruments is defined as Level 1, and all laboratory analyses performed will be analytical level IV or the equivalent for radionuclides.<sup>4</sup>

**Methods:** Analytical methods for the chemical constituents are defined by the US EPA Contract Laboratory Program (CLP) statement of work for inorganic analysis<sup>5</sup> and statement of work for organic analysis.<sup>6</sup> Analytical methods for the radionuclides are defined by the Environmental Restoration Program (ERP) statement of work for radiological analyses.<sup>7</sup>

**Detection Limits:** These are established by the US EPA CLP statements of work for inorganic and organic analysis. Required detection limits for the radiochemical analyses are defined in the ERP statement of work for radiological analyses.

**Data Quality.** All data collected will meet CLP data quality criteria or equivalent as defined in the sampling and analysis plan.

**Data Validation.** The data will be validated in accordance with US EPA functional guidelines<sup>8</sup> and ERP standard operating procedures.<sup>9,10,11,12</sup> All data from laboratory analyses will be validated to Level A or B, as defined by ERP Program Directive 5.8.<sup>13</sup>

## **TRA-16, TRA Inactive, Radioactively Contaminated Tank at TRA-614**

**Objectives.** For TRA-16 the objective is to collect adequate sampling and analysis data to determine the presence or absence of contamination at the site following tank removal and site closure.

**Data Uses.** The data will be used to characterize the site, determine the presence or verify the absence of contamination, and to qualitatively evaluate risk.

**Contaminants of Concern.** The preliminary contaminants of concern were identified from the 1989 analyses of the tank contents. These include volatile and semi-volatile organic compounds, metals, and alpha-, beta-, and gamma-emitting radionuclides.

**Risk-Based Level of Concern.** The risk-based levels of concern for the potential contaminants of concern at TRA-16 have not been calculated.

**Pathway of Concern.** See Section 3 above.



**Media of Concern.** The media of concern to be sampled during the Track 2 investigation is soil.

**Sampling Methods and Procedures.** A minimum of two samples will be collected from the bed of the tank excavation following procedures outlined in a sampling and analysis plan. In the event that contamination is discovered at the site, additional samples will be collected from the bed and sides of the excavation during removal of the contaminated soil.

**Background and Critical Samples.** No background samples will be necessary because background concentrations have been established for the Test Reactor Area. Critical samples will be defined in the sampling and analysis plan.

**Analytical level, method, and detection limits and data quality and validation.** Criteria and methodology for all of these are the same as those specified for site TRA-15

### **TRA-19, TRA Radioactive Tanks #1 and #4 at TRA-630**

**Objectives.** For TRA-19 the objectives are to collect adequate historical data to determine the potential contaminants of concern and to determine the presence or absence of contamination resulting from operation of the original tanks at the site.

**Data Uses.** The data will be used for site characterization and for a evaluation of risk.

**Contaminants of Concern.** The preliminary contaminants of concern were identified from the 1986 analyses of the sludges removed from the four tanks. These include alpha-, beta-, and gamma-emitting radionuclides and metals. Additional contaminants of concern may be identified from process knowledge collected during the investigation. However it is currently believed that there is no contamination present.

### **TRA-603/605, Warm-Waste Sump Tank**

**Objectives.** For TRA-603/605 the objective is to collect adequate historical data to determine the potential contaminants of concern, and to determine the presence or absence of contamination resulting from operation of the piping and tank at the site. If inadequate historical information is available to determine if the piping leaked, a limited field investigation such as gas tracer test will be conducted.

**Data Uses.** The data will be used for site characterization and a evaluation of risk.

**Contaminants of Concern.** The preliminary list of contaminants of concern is limited to radionuclides produced during nuclear reactor operations. Additional contaminants of concern may be identified from process knowledge collected during the investigation.

## **6. DELIVERABLES**

1. Scope of Work and scoping package incorporating comments and discussion during scoping meetings, as resolved.
3. A draft sampling and analysis plan (SAP) following the format in the Track 2 guidance document.
4. A final SAP and written response to comments on the draft SAP.
5. A draft scoping summary report following the outline in the Track 2 guidance document.
6. A final scoping summary report and written response to comments on the draft report.

## 7. REFERENCES

1. U.S. Environmental Protection Agency Region 10; State of Idaho, Department of Health and Welfare; and U.S. Department of Energy Idaho Operations Office, *Federal Facilities Agreement and Consent Order 1088-06-29-120*, December 4, 1991.
2. Rolfe, R. L. and Wills, E. L., *Characterization of the Materials Testing Reactor*, EG&G Idaho Inc., WM-FL-83-016, April 1984.
3. DOE-ID, *Track 1 Sites: Guidance for Assessing Low Probability Hazard Sites at the INEL*, Draft, DOE/ID-0340, October 1991.
4. USEPA, *Data Quality Objectives for Remedial Response Activities, Development Process*, EPA/540/G-97/003, March 1987.
5. Environmental Protection Agency Contract Laboratory Program, *Statement of Work for Inorganic Analysis - Multi-Media, Multi-Concentration*, ILM02.0, March 1990.
6. Environmental Protection Agency Contract Laboratory Program, *Statement of Work for Organic Analysis - Multi-Media, Multi-Concentration*, ILM01.0, March 1990.
7. EG&G Idaho, Inc., *Statement of Work for Radiochemical Analyses Performed for the Environmental Restoration Program at the INEL*, ERP-SOW-33, October 1991.
8. EPA, *Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses*, United States Environmental Protection Agency, Hazardous Site Evaluation Division, Washington, D.C., February 1988.
9. EG&G Idaho, Inc., Standard Operating Procedure 12.1.2, "Radiological Data Validation," Environmental Restoration Program.
10. EG&G Idaho, Inc., Standard Operating Procedure 12.1.2, "Validation of Volatile and Semi-Volatile Organic Gas Chromatography/Mass Spectrometry Data," Environmental Restoration Program.
11. EG&G Idaho, Inc., Standard Operating Procedure 12.1.4, "Validation of Gas Chromatographic Data," Environmental Restoration Program.
12. EG&G Idaho, Inc., Standard Operating Procedure 12.1.5, "Inorganic Data Validation," Environmental Restoration Program.
13. EG&G Idaho, Inc., Program Directive 5.8, "Control of Nonconforming Analytical Data," Environmental Restoration Program.

## **Appendix F**

**Comments and Resolutions for  
"Preliminary Scoping Track 2 Summary Report  
for Operable Unit 2-05"  
EGG-ER-11114, January 1994  
Draft, Revision 1**

4/13/94

Comments and Resolutions for  
 "Preliminary Scoping Track 2 Summary Report for Operable Unit 2-05"  
 EGG-ER-11114, January 1994  
 Draft, Revision 1

REFERENCE:

EPA = Environmental Protection Agency Region 10  
 IDHW = Idaho Department of Health and Welfare

ACRONYMS:

|       |                                        |       |                                          |      |                                 |
|-------|----------------------------------------|-------|------------------------------------------|------|---------------------------------|
| BH    | borehole                               | RBSC  | risk based soil concentration            | SF   | slope factor                    |
| CSM   | conceptual site model                  | RCT   | radiological control technician          | SOW  | scope of work                   |
| FTL   | field team leader                      | RI/FS | remedial investigation/feasibility study | SVOC | semi-volatile organic compounds |
| OU    | operable unit                          | RL    | reporting limit                          | TRA  | Test Reactor Area               |
| PSP   | preliminary scoping package            | RPD   | relative percent difference              | VOC  | volatile organic compounds      |
| QRRET | qualitative risk and reliability table | SAP   | sampling and analysis plan               |      |                                 |

| Item | Page or reference | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Resolution                                                                                                                                                                                                                                                                                                                                                                                                              | Refer-ence |
|------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1    | General           | The organization of the report should be improved. All required sections are present, but the order of presentation is not logical. For example, a conceptual site model (Figure 2-2) is presented in Section 2.1.2 (page 2-1) as the basis for the entire sampling plan and risk assessment. Breaks in pathways (as shown in Figure 2-2) should be explained in the text in section 2.1.2. Also, this model is not discussed, and the omitted routes of exposure are not justified until Section 2.2.2.2 on page 2-24. | The report was organized in accordance with the Track 2 guidance. The CSM discussion has been expanded in Section 2.1.1, and Sections 3, 4, and 5 have been revised to be consistent with Section 2.                                                                                                                                                                                                                    | EPA-1      |
| 2    | General           | a. In addition, the document should contain explicit conclusions and recommendations for each site in the operable unit (OU).                                                                                                                                                                                                                                                                                                                                                                                           | a. The Track 2 summary report should not include explicit conclusions and recommendations for each site. Only the results and conclusions from the preliminary recommendation of the PSP and scoping meeting should be presented. Each agency is to reach an independent conclusion and present their recommendation in a separate decision statement. DOE recommendations will be provided in their decision statement | EPA-2      |

| Item | Page or reference         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Resolution                                                                                                                                                                                                                                                                   | Reference |
|------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 2    |                           | <ul style="list-style-type: none"> <li>b. There are implicit "no further action" recommendations for two of the four sites in Sections 2.2.5 and 3.2.5, but details such as pathways evaluated and specific risk results should be discussed.</li> <li>c. No qualitative risk and reliability evaluation is presented for the other two sites. (Section 4.2 and 5.2).</li> <li>d. A new Section 6 should be created to summarize conclusions and recommendations for each site.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>b. The risk assessment summary has been expanded to include discussion of pathways and risk results.</li> <li>c. QRRETs already appear in Sections 4 and 5 and have been added to Section 2 and 3.</li> <li>d. See part a.</li> </ul> |           |
| 3    | General                   | <p>Recommendations related to the use of GWSCREEN for the calculation of risk for the groundwater pathway at TRA-15 and TRA-16 are as follows:</p> <ul style="list-style-type: none"> <li>a. The default value of 570 m/yr, as listed in the Track 2 guidance manual, Table C-3, was used for pore velocity. According to the Track 2 guidance, site-specific values should be input for pore velocity when available. It is suggested that the site-specific values obtained from the remedial investigation and feasibility study (RI/FS) at Test Reactor Area (TRA) OU-12 should be used in the calculations.</li> <li>b. The GWSCREEN input file should be checked and signed by someone other than the file creator because of the high potential for input error. The output file provides the designated signature lines to be filled in by participants. These signatures were not provided for the TRA-15 and TRA-16 calculations. The calculations should be checked and the approval signature should be provided to ensure GWSCREEN output file integrity and confidence in use.</li> </ul> | <ul style="list-style-type: none"> <li>a. GWSCREEN runs have been revised to use the site-specific aquifer flow velocity of 478 m/yr (4.3 ft/day) identified in the OU 2-12 RI/FS.</li> <li>b. The GWSCREEN files have been reviewed and signed.</li> </ul>                  | EPA-3     |
| 4    | Sec 2.1.3, pg 2-3, para 1 | The text states that borehole 2 was positioned east of the dry siting well centerline. According to the location shown on Figure 2-3, this borehole is actual located west of the dry siting well centerline. This discrepancy should be resolved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Figure 2-3 is correct. The text has been revised.                                                                                                                                                                                                                            | EPA-4     |

| Item | Page or reference                      | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Reference |
|------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 5    | Sec 2.1.3, pg 2-3, last para           | Insufficient recovery of samples at borehole 2A resulted from the type of soils encountered and described as "pea gravel backfill." It is understood that sample recovery would be low because of the type of equipment used (split-spoon sampler) and type of soil described. The text states that backfill material was encountered to the total depth of 38 feet 4.5 inches in the borehole. This statement should be rechecked for accuracy, and more detailed description of soils encountered at the boreholes should be provided.                      | More detailed description of encountered soils has been included.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | EPA-5     |
| 6    | Sec 2.1.3, Table 2-1, pg 2-3           | This table contains errors in the last column. For example, units should be PCi instead of PCi/L and the sign of the exponent for cobalt-60 in total activity should be positive instead of negative.                                                                                                                                                                                                                                                                                                                                                         | The last column has been verified and corrected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | EPA-6     |
| 7    | Figure 2-2 pg 2-4                      | The term "Tracking" is used here and for each Conceptual Site Model in the 2-05 report. Please define tracking.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Tracking refers to the process of contamination adhering to shoes or clothing after contact. The definition has been added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IDHW-1    |
| 8    | Sec 2.1.4, pg 2-5                      | Deviations from the sampling and analysis plan (SAP) for TRA-15 are described in this section. A revision in the borehole locations is apparent from reviewing the statement of work (SOW) and the actual locations shown on Figure 2-3. In the SOW, a borehole location east of the dry siting well centerline was proposed. This proposed location seems appropriate for characterizing the source. An explanation for the change in borehole locations be provided in the summary report since the SAP, which may explain this deviation, is not provided. | The SOW indicates the three BH will be located as follows: one BH 5 ft from the drain, one BH west of the basin, one BH east of the basin from which surface samples will also be collected. The SAP indicates the location of the BH from which surface samples are collected will be selected by the FTL based on surface survey results, and is discussed in Section 2.1.3. The intent was to maximize detection of surface contamination as close to the basin as possible on the south side. Although the location of BH 3 is not a deviation from the SAP, it is a minor deviation from the SOW. A statement has been added in Section 2.1.4 that the location was a minor deviation from the SOW. | EPA-7     |
| 9    | Table 2-3, pg 2-6 & Table 2-5, pg 2-13 | The concentrations of detected compounds at TRA-15 are listed in these tables. The lists are associated with two sources evaluated separately in the risk assessment. To clarify the selection of the type of source, it is strongly recommended that these tables be reorganized to correlate the compounds detected with the associated surface and tank leak sources identified in Section 2.2.1.3 and Figure 2-5.                                                                                                                                         | These two tables are presented before the discussion of surface versus cone sources. The type of source is correlated to the contaminants of concern in Table 2-9. Leaving the list of contaminants in Tables 2-3 and 2-5 in alphabetical order would be less confusing than rearranging them and rearranging the contaminants would provide no additional information.                                                                                                                                                                                                                                                                                                                                  | EPA-8     |

| Item | Page or reference                | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                             | Reference |
|------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 10   | Sec 2.2.1, pg 2-11, para 1       | The text states that calcium was eliminated from consideration in the risk assessment. However, Table 2-5 shows that calcium was not omitted. Other compounds listed in Table 2-5 that have apparently been eliminated from consideration in the risk assessment include lead, chloride, phosphate, and sulfate. The text should explain the reason these compounds were omitted and the discrepancies between the text and Table 2-5 should be resolved.                                | Calcium was not addressed in the risk assessment due to a lack of EPA-approved toxicity data (as stated in the first paragraph of Section 2.2.1.2). We have removed calcium from the list of contaminants given in the first paragraph of Section 2.2.1.1.                                                                                                                                                                             | EPA-9     |
| 11   | Sec 2.2.1.2, Table 2-6a, pg 2-15 | Chromium is evaluated in the risk assessment and is not listed in this table. Contaminant-specific parameters for chromium should be listed in this table.<br><br>The slope factor units should have "-1" exponents. The "allowable water concentrations" should be defined and correctly referenced. The cited reference (the Integrated Risk Information System) contains several types of regulations and guidance for water concentrations of contaminants, but none has that label. | a. Chromium values have been added to the table<br><br>b. Exponents of "-1" have been added to the SF units. Additionally, footnotes have been added to the table saying "Noncarcinogenic allowable water concentration = oral RfD * 37 (DOE, 199-3)" and "Carcinogenic allowable water concentration is calculated using 8.5E-05/oral SF for nonradioactive carcinogens and 4.8E-11/oral SF for radioactive carcinogens (DOE, 1993)." | EPA-10    |
| 12   | Table 2-6a pg 2-15               | The heading of columns 4 and 5 is Allowable water concentration. Please define this term. In Appendix A, the numbers from these columns are termed limiting contaminant groundwater concentrations.                                                                                                                                                                                                                                                                                      | Footnotes have been added to the table giving the equations used to calculate these values. "Allowable water concentration" is an EPA term used in the IRIS database; "limiting groundwater concentration" is a term used in the code GWSCREEN.                                                                                                                                                                                        | IDHW-2    |
| 13   | Sec 2.2.1.2, Table 2-6b pg 2-16  | The slope factor units should have "-1" exponents.                                                                                                                                                                                                                                                                                                                                                                                                                                       | Exponent of "-1" has been added to the SF units.                                                                                                                                                                                                                                                                                                                                                                                       | EPA-11    |
| 14   | Sec 2.2.1.3, pg 2-18, para 3     | a. The text should explain why some chemicals in the cited Table 2-9 are listed as "cone sources" while others are listed as "surface sources." Since the terms are explained in Section 2.2.2.1, it is recommended that the text be reorganized so that the terms are defined before they are used.                                                                                                                                                                                     | a. The next to last sentence of the third paragraph on page 2-18 has been revised to read "Consideration was also given to whether the contaminant originated from the site's leaking storage tank (cone source) or whether it migrated down from the surface (surface source)."                                                                                                                                                       | EPA-12    |



| Item | Page or reference            | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Reference |
|------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 14   |                              | <p>b. The text notes that the surface source was characterized based on a very limited data (analytical soils data collected only at borehole 3 and only the 0- to 0.5-foot and 1- to 3-foot depth intervals). The total volume for surface source contaminants calculated in the risk assessment for the groundwater pathway (the only pathway considered) is 92.8 m<sup>3</sup>, over 2 times the total volume of 40.8<sup>3</sup> estimated for the tank leak source. The surface source significantly influences the outcome of the risk assessment based on the estimated volume of contaminated soil. Because it is based on very limited data, the estimated volume of contaminated soil may be unrealistic and should be reconsidered.</p> <p>c. In addition, the text states that the type of source was used to estimate only the volume of soil for calculating the mass of contaminant present. However, the text should be revised to state the type of source also controls the infiltration rate, volumetric water content, and receptor distance values selected for input shown on Table 2-10.</p> | <p>b. Because the size of the surface source significantly influences the risk assessment, conservatism was maintained by using a source volume larger than probable. With the exception of arsenic, all risks are less than 1E-06. Arsenic was detected in all soil samples collected, and may not be present in concentrations greater than background. However, arsenic was not eliminated because background data in the Track 2 guidance document are footnoted with a warning that the data may not be reliable and should be used with caution. All HQs are less than 1.</p> <p>c. The last sentence in the paragraph has been revised to read "The volume of the source (see Figure 2-5) controlled the volume of soil used to calculate the mass of contaminant present, and the infiltration rate, moisture content and receptor distance used in the contaminant transport calculations."</p> |           |
| 15   | Sec 2.2.1.3, pg 2-18, para 4 | The text states that the GWSCREEN output is provided in Appendix A. Appendix A contains the GWSCREEN output for the surface source only. The output for the tank leak (cone source) should also be provided in Appendix A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | GWSCREEN output files for the cone source have been included in Appendix A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EPA-13    |
| 16   | pg 2-18 fourth para          | This paragraph incorrectly refers to GWSCREEN, version 2.01, when the version used in the attached runs is 2.02.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The version number has been changed to 2.02.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | IDHW-3    |

| Item | Page or reference               | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Reference |
|------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 17   | pg 2-19, Table 2-8              | It is stated in the source discussion that the contamination cannot be contacted by digging a 10 ft basement, as the site is buried 13 ft. The implicit assumption is that, in the case of radiation, three feet of soil provides sufficient shielding to eliminate risk due to external exposure. Please explain how this was determined.                                                                                                                                                                                                                                                                                                                                                                                                                                          | Section 3.1.2.5 of the Track 2 guidance manual (DOE/ID-10389, January 1994) states that only radionuclides detected in the top 10 feet of soil should be retained for evaluation by the external exposure pathway. Additionally, the half-thickness for soil (the thickness of soil that will decrease gamma radiation exposure by one half) is approximately 8 inches. Three feet of soil (from 10 ft to 13 ft) is approximately four half-thicknesses, so the exposure produced by the buried radionuclides can be expected to be 1/16th of its 13 ft value by the time it reaches the 10-ft depth (this estimate does not include shielding from concrete that would be included in a residential basement). | IDHW-4    |
| 18   | Sec 2.2.1.3, Table 2-9, pg 2-20 | Chromium was included in the risk calculations but is not listed in Table 2-9. The data for chromium should be listed in this table. The selection of the source type for each compound should be rechecked and verified. Cesium 137 is listed as a surface source and was treated as a surface source in the GWSCREEN calculations shown in Appendix A. The analytical soil data do not support the selection of the source type. The highest concentration observed in the surface soils was 33 pCi/g. The highest concentration observed in the samples collected at borehole 1 was 2,000 pCi/g at a depth interval of 27 to 31 feet. To further substantiate the question of source, the concentration of Cesium-137 at the 25 to 27 foot interval in borehole 1 was 314 pCi/g. | <p>a. Chromium has been added to Table 2-9.</p> <p>b. Cs-137 should have been treated as a cone source. The GWSCREEN run for CS-137 has been revised and the source assignments of all other contaminants have been verified.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EPA-14    |
| 19   | Sec 2.2.2.1 1st para, pg 2-24   | The text states that surface chemicals are not a part of the site, except when they have leached below 13 ft. Surface pathways are not evaluated as part of OU 2-05, so it is not possible to determine the actual risk for a receptor at this operable unit without utilizing a cumulative approach which involves another operable unit. The text should state that the risk associated with this operable unit represents only part of the total risk to a potential receptor on the surface.                                                                                                                                                                                                                                                                                    | A sentence has been added to the end of the first paragraph stating "Since the surface contamination is not addressed in this assessment, except as it affects the groundwater ingestion pathway, the risk calculated in this assessment represents only a portion of the total risk to a potential receptor at this site."                                                                                                                                                                                                                                                                                                                                                                                     | IDHW-5    |

| Item | Page or reference                       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Reference |
|------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 20   | Sec 2.2.2.2<br>1st full para<br>pg 2-25 | It is assumed that only 10 cm (3.9 in) per year of water is available to collect on the floor of this "soil covered only" tank basin, and thus available to infiltrate into the french drain. The rationale for assuming that 10 cm/yr is an adequate representation is not presented. A more reasonable, and conservative value, is the average annual precipitation, which is about 20 cm/yr at Test Area North (RI January 1994). This higher value results in an infiltration rate of 100 cm/yr through the french drain based on the text noted. This value should include the potential infiltration from both sides of the concrete basin because both sides, leaking and non-leaking, contribute to the flux through the french rain. | <p>Magnuson, S.O. and D.L. McElroy, 1993, <i>Estimation of Infiltration from In Situ Moisture Contents and Representative Moisture Characteristic Curves for the 30', 110' and 240' Interbeds</i>, RWM-93-001.1, July 18 gives an estimate of the infiltration rate into soils at the INEL of 4-10 cm/yr. 10 cm/yr was chosen to be conservative. (10 cm/yr is also the Track 2 default value.) Evaporation and transpiration at the surface accounts for the difference between the infiltration rate estimation and the 20 cm/yr average precipitation rate.</p> <p>The entire surface area of the tank basin (i.e., 7.9 m x 7.3 m as shown in Figure 2-4, pg 2-12) was used to calculate the volume of water assumed to pass through the french drain. There is another tank basin to the east of the basin analyzed in this assessment, but it is separated by a wall and is equipped with its own french drain.</p> | IDHW-6    |
| 21   | Sec 3.1.3, pg 3-4,<br>para 2            | There is a discrepancy in the text between this section and Section 3.2.2.2 (nature of source and potential for release of contamination). The text in this section states that the soils were field screened for volatile organic compounds (VOCs) and radioactivity, and none was detected. The text in Section 3.2.2.2 states that soil contamination was detected at the tank gauge port/stand pipe. The inconsistency in these statements should be resolved.                                                                                                                                                                                                                                                                            | Section 3.1.3 has been revised to indicate that a small quantity of contaminated soil was detected and removed from the surface around the stand pipe.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | EPA-15    |
| 22   | Sec 3.2.1.1<br>para 1 pg 3-7            | <p>Reference is made to the detection of "several tentatively identified compounds... but were not included in the risk assessment due to a lack of information about the compounds."</p> <p>Information should be included about these compounds but qualified as to the nature of these data. The statement as is raises questions but provides no answers.</p>                                                                                                                                                                                                                                                                                                                                                                             | The tentatively identified compounds have been listed and a brief explanation for not including them in the risk discussion has been added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IDHW-7    |

| Item | Page or reference                                         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                    | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Reference |
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| 23   | Sec 3.2.1.3<br>para 1 pg 3-14                             | The paragraph states that "the effects of progeny due to radioactive decay are not included in this risk assessment".<br><br>The rationale for this statement should be included                                                                                                                                                                                                                                           | EPA-approved slope factors were used for the radionuclides in this assessment. Of the slope factors used in the assessment, the value for U-238 is the only one that includes the effects of progeny. This statement was included to highlight this fact.                                                                                                                                                                                                                                                                                                                                                             | IDHW-8    |
| 24   | Sec 4.2<br>pg 4-4                                         | In view of the description of the site as a high radiation zone, and the statement that the RCT indicated that subsurface contamination exists ("this contamination is from warm waste lines in the subsurface, not from tank operations") please explain the conclusion that qualitative risk is low ( $< 10^{-4}$ ) and under what type of investigation/remedial action the subsurface contamination will be addressed. | The site is defined as potentially contaminated soils resulting from releases associated with the original four tanks in the catch tank vault. Information from the HP logs supports the conclusion that the site, as defined, should be assigned a low qualitative risk. The warm waste lines were repaired when the contamination was detected, and are still in use. The remaining contaminated soils will be discussed during WAG 2 comprehensive RI/FS scoping and appropriately addressed at that time. In the summary report, the contaminated soils are identified and described as being outside of this OU. | IDHW-9    |
| 25   | Sec 3.2.1.2,<br>Tables 3-4a and 3-4b,<br>pgs 3-9 and 3-10 | As with Tables 2-6a and 2-6b, the tabulated "allowable water concentrations" should be defined and referenced.                                                                                                                                                                                                                                                                                                             | Footnotes have been added to the table saying "Noncarcinogenic allowable water concentration = oral RfD * 37 (DOE, 1993)" and "Carcinogenic allowable water concentration is calculated using $8.5E-05$ /oral SF for nonradioactive carcinogens and $4.8E-11$ /oral SF for radioactive carcinogens (DOE, 1993)."                                                                                                                                                                                                                                                                                                      | EPA-16    |
| 26   | Appendices A and B,<br>general                            | These appendixes should include tables of contents to show the specific details included. This is especially important since Appendix A contains 144 pages.                                                                                                                                                                                                                                                                | Tables of contents have been added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | EPA-17    |

| Item | Page or reference                             | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Resolution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Reference |
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| 27   | Appendix A, Sec A.1.1, pg A-3                 | <p>a. This discussion of field precision should be revised. In some cases, a large relative percent difference (RPD) is not significant when the values referenced are near the sample reporting limits (RL). In that case, a small difference in instrument response between samples results in a large RPD. In these cases, a better criterion is "<math>\pm</math>RL" or "<math>\pm</math> 2 RL;" this is the approach used in the U.S. Environmental Protection Agency (EPA) data validation guidelines.</p> <p>b. Conversely, the discussion minimizes one serious discrepancy: the radionuclide results from borehole 1. Of results that are well above the RL, only strontium-90 shows good precision with an RPD of 3. In contrast, gross beta, cobalt-60, and cesium-137 have RPDs of 33, 197, and 200, respectively. These results come from samples composited from two split spoons and from several analyses on different instruments. While it is possible that the compositing was not adequate, the likely explanation is that the soil at that location is extremely heterogenous, probably from precipitated radionuclides (particulate). This results in extremely variable analytical results. Statistical analyses may not provide meaningful results in this case. Therefore, the results may not be representative of the source area and should be used with caution.</p> | <p>a. Field precision was evaluated as outlined in section 2.1.1.2 or Appendix E in the SAP. Note that there was no impact on the risk assessment as a result of changes in the RPD.</p> <p>b. The high RPDs (197 and 200) result from a transcription error and have been deleted from Table A-1. In addition, the only complete exposure pathway for this site is ingestion of groundwater; none of the contaminants detected exceed RBSC calculated for the groundwater pathway (see Table 2-7). The low precision associated with the radionuclide data does not impact the evaluation of the site.</p> | EPA-18    |
| 28   | Appendix A pg A-3 last para, second sent      | Please change "sampling" to "sample".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The suggested change has been made.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IDHW-10   |
| 29   | Appendix A pg A-7, 4th complete para 1st sent | Please change "detected" to "collected".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The suggested change has been made.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IDHW-11   |
| 30   | Sec A.1.3.1, Table A-2, pg A-10               | This table includes errors of transcription, addition, or both. The table should be checked and corrected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The table has been revised to eliminate the transcription errors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EPA-19    |

| Item | Page or reference                                 | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Resolution                                                                                                                                                                                                                                                                                                                                               | Reference |
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| 31   | Appendix A<br>pg A-10, 1st<br>para, last<br>sent. | This discussion refers to rejection of data for VOC and SVOC analysis. A more detailed discussion as to why (spike recovery, equipment problems, field blanks) these data were rejected by the data validators should be added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The following information has been added to the discussion. Sixty-four data points, all nondetects, for sample ID 2TB031010S were rejected by data validators because BNA surrogate recovery was less than 10%. For all three VOC samples from the critical intervals, the 2-butanone data, also all nondetects, were rejected due to a low initial RRF. | IDHW-12   |
| 32   | Appendix A,<br>Table A-3,<br>page A-14            | <p>a. This table lists actual soil samples collected at borehole 1 and comments. Samples were collected from drill cuttings for the 13- to 15- and 15- to 17-foot intervals according to the comment provided for these intervals. The representativeness of the samples is in question. Hollow stem auger drill cuttings are not representative of sample intervals below about 5 feet because of continual cutting of the borehole wall and the mixing of cuttings from different depths as the cuttings return to the surface.</p> <p>b. The table lists that soils collected at the 29- to 31-foot interval were analyzed for radionuclides. The data printout sheets in Appendix A do not contain radionuclide data for this interval. This discrepancy should be resolved.</p> | <p>a. Sampling was performed as outlined in the SAP (see page 2-39). Table A-3 has been revised with "...and may not be representative of the interval sampled."</p> <p>b. The information in the data sheets is correct and Table A-3 has been revised accordingly.</p>                                                                                 | EPA-20    |
| 33   | Appendix A,<br>pages A-36<br>and A-37             | These pages are part of an unidentified table that apparently shows unvalidated laboratory data. The table should be identified, and only the validated results should be included. "Q Flags" appearing with some data seem to be laboratory qualifications and should be identified accordingly. In addition, two of the data points in Table A-1 that were commented on previously (field duplicate results for cobalt-60 and cesium-137) are not included here. This discrepancy should be resolved, and the data explained.                                                                                                                                                                                                                                                      | These tables list validated data. The tables have been properly identified. The Q flags are laboratory qualifications which have been updated to reflect the validation results. These tables are accurate. Table A-1 has been revised accordingly.                                                                                                      | EPA-21    |
| 34   | Appendix A<br>pg A-97,<br>GWSCREEN<br>Run         | The input to this run of GWSCREEN is not consistent with the tabulated input found in Table 2-10, page 2-22.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | This GWSCREEN run was created for another project and was inadvertently included in the report. The run has been removed.                                                                                                                                                                                                                                | IDHW-13   |
| 35   | Appendix A<br>pg A-97 thru<br>A-144               | GWSCREEN runs for the french drain are not included in this appendix although input for that scenario is included in Table 2-10 on page 2-22.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Copies of all GWSCREEN runs have been included.                                                                                                                                                                                                                                                                                                          | IDHW-14   |

| Item | Page or reference                                   | Comment                                                                                                                                                                                                                                                                                                                                                                                                           | Resolution                                                                                      | Reference |
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| 36   | Sec B.1.1,<br>pg B-3,<br>para 1                     | The text notes an RPD of 136 for aluminum in the field duplicates. However, both Table B-1 and the data (page B-16) show an RPD of 25. Table B-1 has a calculation error for iron (RPD of 13, not 97). If one allows for results near the RL, the field precision appears to be reasonable. It should be determined whether the errors are in the tables or the text, and appropriate corrections should be made. | The appropriate corrections have been made.                                                     | EPA-22    |
| 37   | Appendix C<br>pg C-8 para<br>under July<br>29, 1985 | The text states that a litmus paper check of the liquid showed pH of "9" (slightly acidic). A pH of 9 is slightly basic, not acidic.                                                                                                                                                                                                                                                                              | This text is taken directly from the HP logs. A footnote has been added to point out the error. | IDHW-15   |
| 38   | Appendix C<br>pg C-8 para<br>under July<br>31, 1985 | The text refers to an activity level of 4,300-22,00 counts per minute for gamma. It is assumed that zero was inadvertently omitted from 22,00.                                                                                                                                                                                                                                                                    | The error has been corrected.                                                                   | IDHW-16   |