

FINAL REPORT



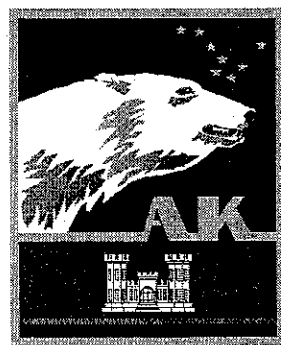
OPERABLE UNIT B POLELINE ROAD DISPOSAL AREA

LONG-TERM GROUNDWATER MONITORING REPORT

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Alaska District

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Alaska District, Anchorage, Alaska

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LIST OF ACRONYMS

Army	United States Army, Public Works
bgs	below ground surface
CRREL	Cold Region Research and Engineering Laboratory
DL	analytical detection limit
ERA	ecological risk assessment
ESE	Environmental Science & Engineering, Inc.
FS	feasibility study
HHRA	human health risk assessment
HVE	high vacuum extraction
IDW	investigation-driven wastes
l	liter
MCL	maximum contaminant level
mg	milligram
OUB	Operable Unit B
PCE	tetrachloroethene
PID	photoionization detector
ppm	parts per million
RI	remedial investigation
SPH	six-phase heating
SVE	soil vapor extraction
TCE	trichloroethene
URS	URS Corporation
VOCs	volatile organic compounds

URS Corporation (URS), formerly URS Greiner Woodward-Clyde, was contracted by the United States Army Corps of Engineers on behalf of the United States Army, Public Works (Army) to conduct long-term groundwater monitoring at Operable Unit B (OUB), Poleline Road Disposal Area, Fort Richardson, Alaska. OUB is a former Army disposal area for chemical warfare training materials. OUB has been the subject of several environmental investigations, a feasibility study, and a treatability study.

Long-term groundwater monitoring has two objectives, 1) collect data on groundwater contaminant trends, and 2) devise an appropriate long-term site monitoring plan. According to the *Long-Term Groundwater Monitoring Work Plan, Operable Unit B, Poleline Road Disposal Area, Fort Richardson, Alaska* (WC 1997), eight rounds of sampling will be performed initially to evaluate groundwater contaminants over time. Seven rounds of sampling have been completed. The sampling dates were: November 1997, June 1998, October 1998, March 1999, October 1999, March 2000, and October 2000. This report summarizes the seventh round of sampling conducted in October 2000.

Tasks to be completed under the *Long-Term Groundwater Monitoring Work Plan, Operable Unit B, Poleline Road Disposal Area, Fort Richardson, Alaska (WC 1997)* include the following:

- Conduct 8 rounds of groundwater sampling for volatile organic compounds (VOCs) in 20 monitoring wells at OUB, and sample for natural attenuation parameters during the first 2 rounds
- After each sampling round, prepare a technical memorandum that includes the results of the sampling event, a description of changes in contaminant concentrations since the previous sampling event, and recommendations for the next round of sampling
- Evaluate natural attenuation data after the first two rounds of sampling, and revise the sampling plan based on the evaluation

Evaluate data after the eight rounds of sampling are complete, and provide recommendations for future long-term monitoring needs.

3.1 LOCATION

The Fort Richardson Army Post occupies 61,500 acres of land (Figure 3-1). OUB is located on the Fort Richardson Army Post approximately 10 miles northeast of Anchorage, Alaska, 1 mile south of the Eagle River, and 0.6 miles north of the Anchorage Regional Landfill (Figure 3-2). Access to the area is by Poleline Road, a gravel road that runs northeast southwest along a powerline route and the Eklutna Water Line. OUB is bisected by Barrs Boulevard, a gravel road extending from the Glenn Highway to Poleline Road.

3.2 SITE DESCRIPTION

OUB is a low-lying, relatively flat area, bordered by a wooded, 80-foot hill to the west, wetlands directly south and southwest of the main disposal area (Area 3 and Area 4), and low, wooded hills on the remaining borders (Figure 3-3). The area where buried waste was detected by geophysical survey is approximately 1.5 acres. The main disposal area was cleared of vegetation during a 1994 removal action. No significant revegetation has occurred.

3.3 GEOLOGY

Regional surficial deposits are fluviually reworked glacial sediments and glacial tills. These deposits appear to be up to 30 feet thick at the site and consist of unstratified to poorly stratified clays, silts, sands, gravels, and boulders. A basal till lies below the surficial deposits and overlies an advance moraine/till complex. Underlying the glacial sediments is bedrock composed of hard, black fissile claystone.

The subsurface soils are dense glacial tills and generally silty sands with some gravel. Thin, discontinuous clay lenses were observed rarely. Observations during drilling confirm a typical fluvio-glacial setting; an heterogeneous system of discontinuous, relatively permeable channels with intervening denser, less permeable sediments.

3.4 HYDROGEOLOGY

Four water-bearing intervals have been identified at OUB, 1) a perched interval, 2) a shallow interval, 3) an intermediate interval, and 4) a deep aquifer. The detection of contaminants in all four intervals suggests that they are interconnected to some degree. Observations made while drilling indicate that the saturated intervals are separated by zones of very dense, low porosity, compact tills. The compact tills are dry or slightly moist.

The perched interval was observed in borings drilled between Area A-2 and the wetlands, and in Area A-3 (Figure 3-3). The top of the perched interval was encountered at 4 to 10 feet below ground surface (bgs), and the bottom was at 6 to 12 feet bgs. The average thickness of the perched interval is approximately 5 feet. The perched interval is recharged mainly by surface water from the wetlands, although some recharge also occurs from precipitation. The only monitoring well installed in the perched interval is MW-14 (AP-3746).

The shallow, saturated interval is an average of 10 feet thick; the top was encountered at 20 to 25 feet bgs, and the bottom was at 28 to 36 feet bgs. Groundwater elevations indicate that shallow groundwater is flowing in a north-northeast direction. Because of the localized nature of water-

bearing zones at this site, it is difficult to determine whether the water-bearing units are hydraulically connected between wells. The shallow interval is recharged by water from the discontinuous perched interval and by infiltration of precipitation.

The intermediate interval was observed while drilling monitoring well MW-16 (AP-3748). The saturated portion of the intermediate interval was encountered at approximately 65 to 95 feet bgs in MW-16 (AP-3748). The intermediate saturated interval does not correlate with the other deep wells on site, suggesting that it is an isolated lens with limited continuity. There may be several isolated lenses of saturated material within the intermediate interval.

Five monitoring wells at OUB penetrate the deep aquifer, the top of which was encountered from approximately 80 to 125 feet bgs. The deep aquifer is an advance moraine/till complex with thickness varying from 3 to 40 feet. Groundwater elevations indicate that the flow direction in the deep aquifer is locally to the northeast and regionally to the northwest. Available data indicate that the deep aquifer below the site is not connected with deep aquifers used for drinking water wells in the community of Eagle River (over 1 mile northeast).

The deep aquifer overlies a claystone bedrock unit with unknown thickness. Four of the five deep wells at OUB penetrate the bedrock unit, and the well screens extend slightly into the bedrock. The top of bedrock was encountered from 120 to 170 feet beneath the site.

The ultimate discharge area of the water-bearing intervals at OUB is probably the Eagle River, approximately 1 mile north of the site (Figure 3-2). The Eagle River flows into the Knik Arm of Cook Inlet approximately 5 miles northwest of OUB. The river is not used as a drinking water source.

3.5 LAND USE

The land surrounding OUB currently is used for Army training activities and recreational purposes. The Eklutna Water Line, a pipeline which supplies Anchorage and part of the Eagle River community with drinking water from Eklutna Lake (over 15 miles from the site), runs immediately west of the site.

At present, there are no plans for development of the OUB. Yield from the perched, shallow, and intermediate saturated intervals may be too low to supply an average household, and installation of septic systems would preclude use of the shallow or perched intervals for drinking water. The deep aquifer may provide sufficient yield for drinking water wells; however, future development of the deep aquifer for this purpose is unlikely, due to the proximity of the Eklutna Water Line.

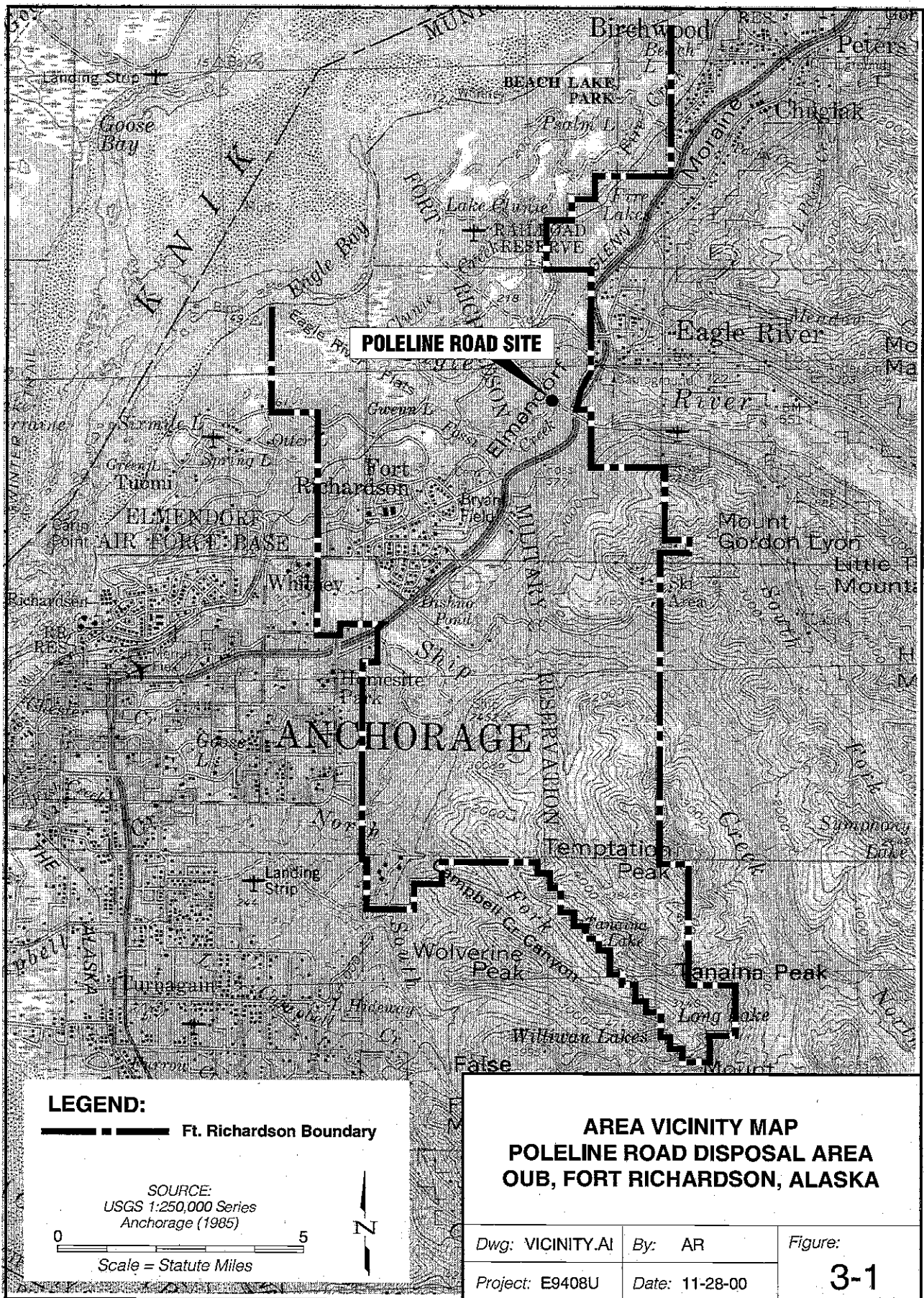
3.6 HISTORY OF INVESTIGATION ACTIVITIES

Several investigations and a removal action have been conducted at OUB since its discovery in 1990. A brief summary of these activities is presented as follows:

- In 1990 and in 1992, Environmental Science & Engineering, Inc. (ESE) conducted site investigations that included a geophysical survey, soil borings, a soil gas survey, monitoring well installation, groundwater sampling, a water level survey, and aquifer (slug) tests (ESE 1990, 1991, and 1993).

- In 1993, OHM conducted a rapid response removal action within areas A-3 and A-4 (OHM 1993).
- In 1994 and in 1995, the Cold Region Research and Engineering Laboratory (CRREL) conducted geophysical surveys (CRREL 1994, 1995).
- In 1995, URS (then Woodward-Clyde) performed a remedial investigation (RI) that consisted of surface and subsurface soil sampling, groundwater sampling, and installation of several new monitoring wells (URS 1995a).
- In 1995, URS conducted a human health risk assessment (HHRA) that included groundwater sampling and modeling (URS 1995b).
- In 1996, URS prepared a feasibility study (FS) to determine remedial alternatives (URS 1996).
- In 1996, URS performed an ecological risk assessment (ERA) in conjunction with an HHRA (URS 1997).
- In 1996, URS conducted a treatability study that provided data concerning soil vapor extraction (SVE) and air sparging. The study also included groundwater sampling and soil borings. (URS 1997).
- For several days in 1996, URS conducted a soil vapor extraction (SVE) evaluation study that included installing additional soil borings and soil/groundwater sampling (URS 1997).
- In 1997, URS conducted a design verification study to evaluate the applicability of six-phase heating (SPH) as an in situ technology for remediating solvent-contaminated soils. The study included soil borings and surface and subsurface soil sampling (URS 1998).
- In 1998, URS performed a dual-phased, high vacuum extraction (HVE) treatability study that included groundwater sampling, installing additional soil borings and monitoring wells, and subsurface sampling. (URS 1999).

Based on the success of SPH on soils, an additional design verification study was conducted in 1999. This recent design verification study evaluated the applicability of SPH as an in situ technology for remediating solvent-contaminated groundwater. New soil borings, surface and subsurface soil samples, and groundwater samples were collected (URS 2000).



POLELINE ROAD SITE

ANCHORAGE

LEGEND:

— — — — — Ft. Richardson Boundary

SOURCE:
USGS 1:250,000 Series
Anchorage (1985)

0 ————— 5
Scale = Statute Miles



**AREA VICINITY MAP
POLELINE ROAD DISPOSAL AREA
OUB, FORT RICHARDSON, ALASKA**

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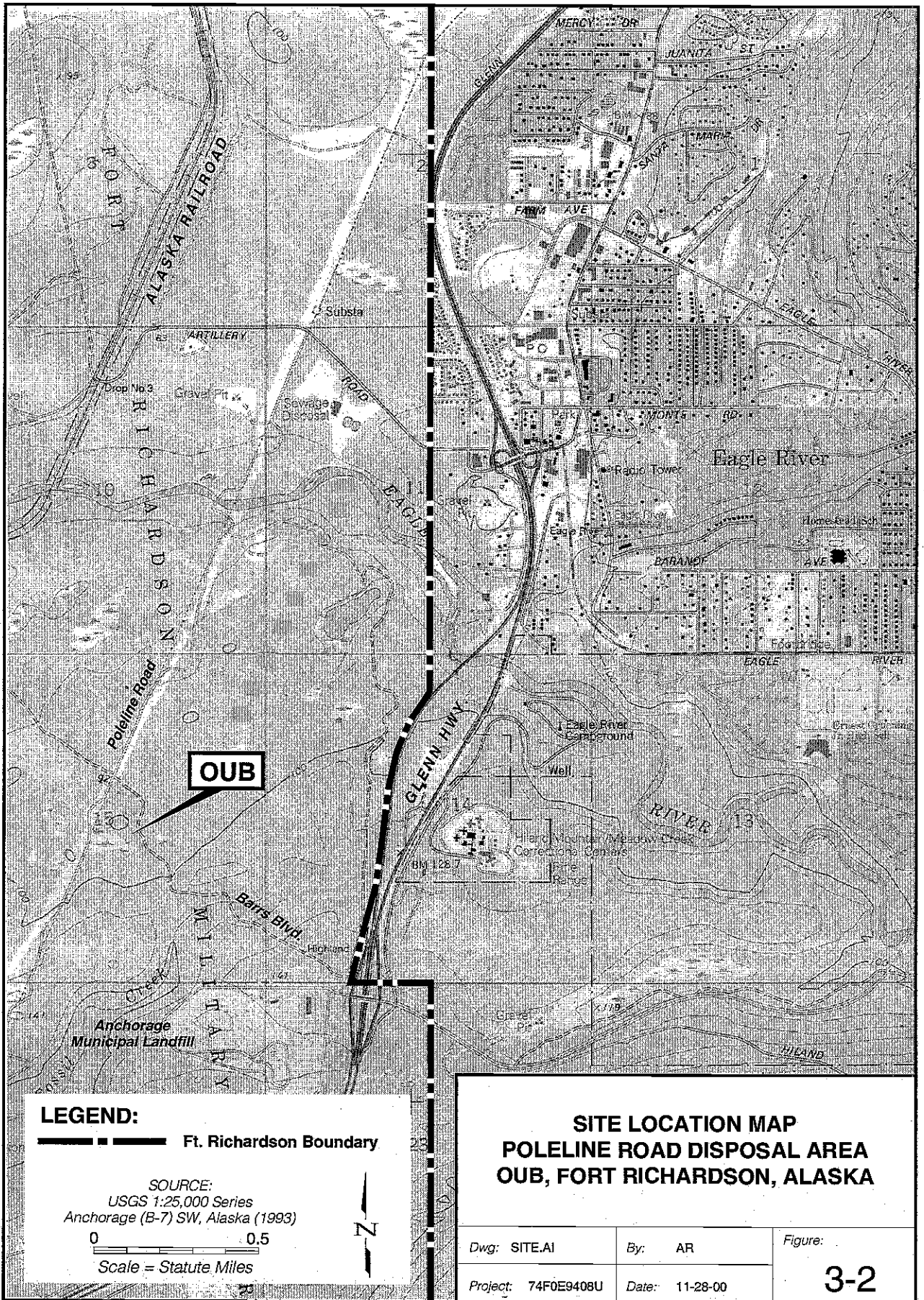
By: AR

Figure:

Project: E9408U

Date: 11-28-00

3-1



LEGEND:

— — — — — Ft. Richardson Boundary

SOURCE:
USGS 1:25,000 Series
Anchorage (B-7) SW, Alaska (1993)

0 0.5
Scale = Statute Miles



**SITE LOCATION MAP
POLELINE ROAD DISPOSAL AREA
OUB, FORT RICHARDSON, ALASKA**

Dwg: SITE.AI

By: AR

Figure:

Project: 74F0E9408U

Date: 11-28-00

3-2

⊕ MW-16

⊕ MW-15

⊕ MW-9

TREES

TREES

AREA A-4

⊕ MW-6
⊕ MW-4 (Dry)

⊕ MW-12

MW-20

⊕ PZ-1

⊕ MW-1

⊕ MW-2

⊕ MW-14 (Dry)

⊕ MW-21

AREA A-2

AREA A-1

⊕ MW-13

⊕ MW-22

AREA A-3

⊕ MW-24

⊕ MW-23

⊕ MW-19

MW-5

⊕ MW-7

⊕ MW-3

TREES

WETLAND

⊕ MW-8

LEGEND:

⊕ Monitoring Wells
Sampled October 2000

⊕ Monitoring Wells Not
Sampled October 2000

MW-1 Monitoring Well Location

PZ-1 Piezometer Well Location

⊕ MW-17 is along Poleline Road,
southwest of wetland.

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.



**SITE MAP
GROUNDWATER MONITORING WELLS
POLELINE ROAD DISPOSAL AREA
OUB, FORT RICHARDSON, ALASKA**

Dwg: 00MARCH3_3

By: AR/SRJ

Figure:

Project: 74-FOE9408U.00

Date: 11/28/00

3-3

Monitoring wells selected for sampling during the initial eight rounds of the long-term groundwater monitoring program are shown on the site map (Figure 3-3). The rationale for sampling each well is presented in the *Long-Term Groundwater Monitoring Work Plan, Operable Unit B, Poleline Road Disposal Area, Fort Richardson, Alaska* (WC 1997). Standard operating procedures were used for sample collection, containerization, labeling, packaging, and sample transport. The procedures follow the guidelines established within the Groundwater Monitoring Plan (WC 1997).

Field tasks for the seventh round of groundwater monitoring included the following:

- Initial headspace readings of vapors in each monitoring well along with the measurement of static water levels
- Collecting field measurements for dissolved oxygen, pH, salinity, specific conductivity, temperature, and turbidity
- Purging and sampling up to 20 monitoring wells for VOCs

4.1 FIELD MEASUREMENTS

Initial headspace measurements for VOC were collected using a photoionization detector (PID) with an 11.7 lamp. Measurements of depth-to-water, pH, specific conductance, salinity, temperature, turbidity, and dissolved oxygen were recorded at each groundwater sampling location. Field measurements collected at each location are summarized in Table 4-1. Results of the field measurements are presented in Section 5 of this report.

4.2 GROUNDWATER SAMPLING

Groundwater samples were collected in accordance with procedures and protocols presented in Sections 4 through 7 of the *Long-Term Groundwater Monitoring Work Plan* and *Addendum No. 1*. Samples were collected using dedicated tubing and a submersible pump. Results of the laboratory analyses performed on groundwater are presented in Section 5 of this report. Laboratory reports are provided in Appendix A.

4.3 INVESTIGATION DERIVED WASTE

All investigation-derived waste (IDW) generated during the field investigation (e.g., equipment decontamination fluids, well purge water, and miscellaneous wastes) was containerized during sampling activities and transported to a U.S. Army Corps of Engineers designated treatment area. Handling and final disposal of all wastes were managed by the contractor under guidance from the Corps of Engineers.

4.4 DEVIATIONS FROM THE LONG-TERM GROUNDWATER MONITORING WORKPLAN

This section lists and describes conditions or actions that resulted in deviations from the work plan. In general, changes and problems encountered during sampling activities include insufficient groundwater for sampling, changes to sampling procedures due to field conditions, and damaged monitoring wells. The following deviations from the work plan occurred during this sampling event:

- No groundwater was encountered in monitoring well MW-14 (AP-3746). This monitoring well was also dry during the 1997, 1998, and 1999 sampling rounds.
- MW-4 (AP-4014) contained less water (0.25 feet) than was necessary to operate the submersible pump; therefore, it was not sampled.
- MW-17 (AP-3749) was not sampled because this monitoring well represents a background well, instead of a down-gradient well.

TABLE 4-1

Field Measurement Results for the October 2000 Groundwater Sampling Event
Summary of Results

OPERABLE UNIT B, POLELINE ROAD DISPOSAL AREA FORT RICHARDSON, ALASKA									
Well ID	API No.	Date Sampled	Dissolved Oxygen (mg/l)	pH	Salinity (%)	Conductivity (mS/cm)	Temperature (oC)	Turbidity (NTU)	
WELLS SCREENED IN SHALLOW AQUIFER									
MW-2	AP-4012	10/13/00	9.84	7.04	0.0	0.263	4.4	0	
MW-3	AP-4013	10/11/00	9.0	7.1	0.0	0.31	4.0	-1	
MW-8	AP-4018	10/11/00	6.0	6.3	0.0	0.29	4.0	-1	
MW-12	AP-3744	10/10/00	9.8	6.7	0.0	0.31	4.0	-1	
MW-13	AP-3745	10/11/00	5.8	6.7	0.0	0.38	7.0	-1	
MW-15	AP-3747	10/10/00	11.7	7.8	0.0	0.20	6.0	-1	
MW-17	AP-3749	--	--	--	--	--	--	--	
MW-19	AP-3981	10/12/00	0.0	6.1	0.0	0.39	11.0	-1	
MW-20	AP-3982	10/11/00	9.7	6.3	0.0	0.22	5.0	-1	
MW-21	AP-3983	10/11/00	0.0	6.3	0.0	0.79	9.0	-1	
MW-22	AP-3984	10/12/00	3.6	6.4	0.0	0.35	17	-1	
MW-23	AP-3985	10/12/00	0.3	6.7	0.0	0.45	20.0	-1	
MW-24	AP-3986	10/12/00	0.1	6.4	0.0	0.51	22.0	-1	
PZ-1	AP-3989	--	--	--	--	--	--	--	
WELL SCREENED IN PERCHED AQUIFER									
MW-14	AP-3746	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER									
MW-5	AP-4015	10/11/00	2.1	6.1	0.0	0.32	10	-1	
WELL SCREENED IN INTERMEDIATE AQUIFER									
MW-4	AP-4014	--	--	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER									
MW-1	AP-4011	10/10/00	12.8	7.6	0.0	0.31	5.0	-1	
MW-6	AP-4016	10/13/00	0.0	8.85	0.02	0.616	5.1	118	
MW-7	AP-4017	10/11/00	0.5	7.3	0.0	0.46	5.0	-1	
MW-9	AP-4019	10/10/00	8.9	7.8	0.0	0.25	4.0	-1	
MW-16	AP-3748	10/13/00	8.49	7.37	0.01	0.353	4.6	1	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

Groundwater samples were collected from 18 of 22 groundwater wells at OUB between October 10 and 13, 2000. The depth to water was measured during well gauging (prior to purging each well for sampling) and was used with the elevation of the top of casing to calculate the water level elevation at each monitoring location. Two quality control duplicate samples, one matrix spike/matrix spike duplicate sample, and an equipment rinsate sample were collected. Tables 5-1 through 5-10 summarize the October 2000 results and provide historical analytical results for VOCs detected in OUB groundwater samples. Figure 5-1 is a graphical display of the chlorinated solvent degradation pathways.

Table 5-12 presents the VOCs that exceeded the maximum contaminant levels (MCLs). The MCL for trichloroethene (0.005 mg/l) was exceeded in 12 wells, with the concentrations ranging from 0.013 to 3.10 mg/l. The VOCs benzene, carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, PCE, 1,1,2-trichloroethene, and vinyl chloride also had concentrations that exceeded the MCLs in six wells. These wells represent a combination of shallow and deep aquifer samples covering most of the site area.

Several remedial activities, which may have impacted the concentration of contaminants in the groundwater, have occurred at the site. The most recent remedial effort was six-phase soil and groundwater heating in Area A-3. Concentrations of primary VOCs (1,1,2,2-tetrachloroethane, TCE, and PCE) were reduced in groundwater samples collected from several wells (MW-19, MW-23, MW-24, MW-21) as a result of the six-phase heating test conducted in the summer and fall of 1999. The impact of the 1999 test was limited to a small area (5,500 ft²). Because of the slow groundwater flow at the site (6.0 x 10⁻⁴ feet/day), it may take from several months to several years before lower concentrations of contaminants are observed in wells away from the test area.

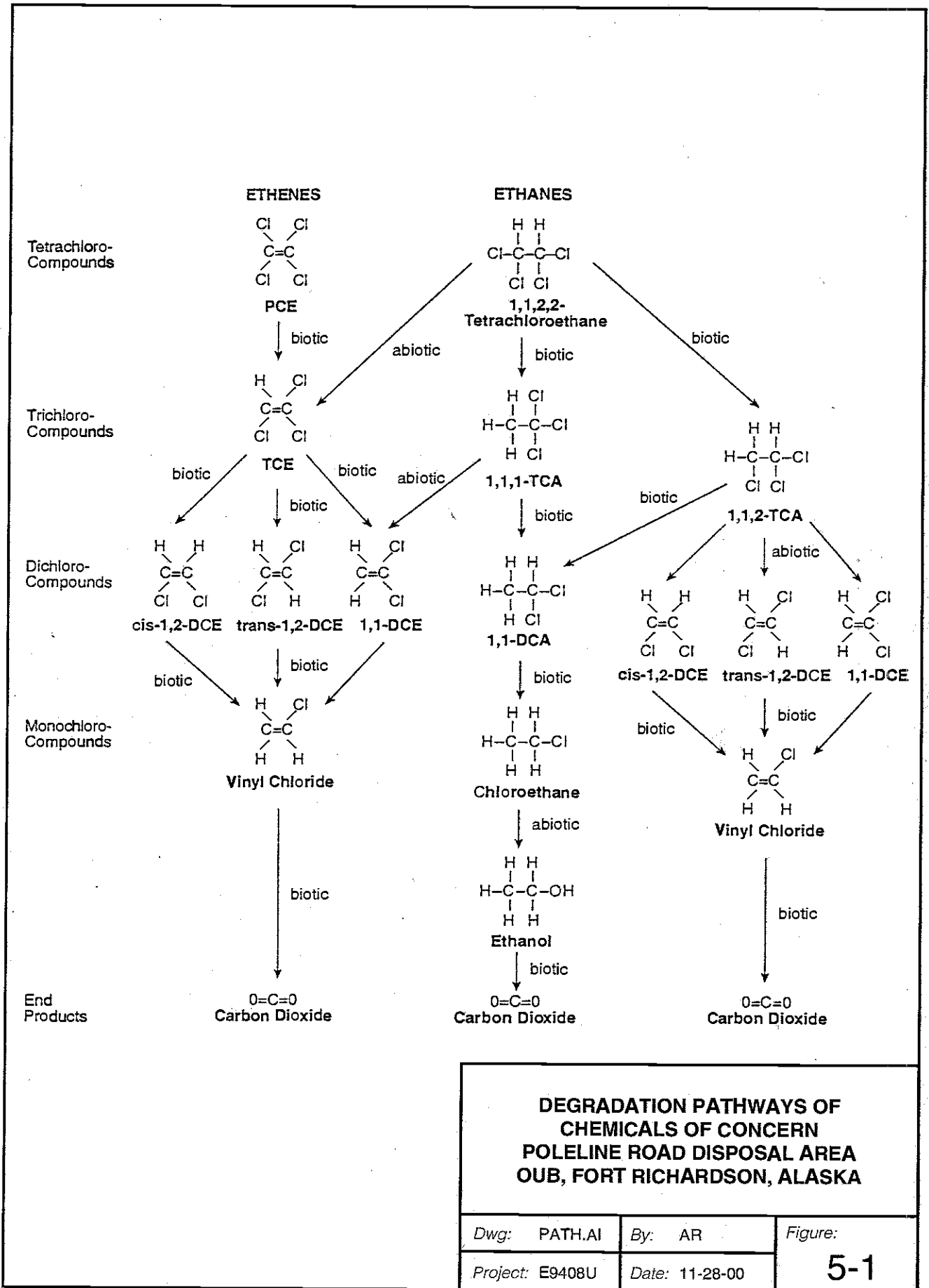
Isoconcentration maps for 1,1,2,2-tetrachloroethane, PCE, and TCE are presented in Figures 5-2, 5-3, and 5-4, respectively.

5.1 HEADSPACE MEASUREMENTS

Headspace measurements were recorded at 18 monitoring wells (Table 5-13). Measurements using an organic vapor monitor showed no volatile organic vapors in the headspace of 16 monitoring wells. The remaining 2 monitoring wells had headspace values of 2.6 and 117.5 parts per million (ppm).

5.2 GROUNDWATER ELEVATION

Table 5-14 summarizes OUB monitoring well water level measurements. The first groundwater samples were collected in November 1995 at the end of a wet summer and fall. Groundwater level measurements were collected every month starting November 1, 1995 and ending October 2, 1996. Water level measurements were also collected during each groundwater sampling round.



DEGRADATION PATHWAYS OF CHEMICALS OF CONCERN POLELINE ROAD DISPOSAL AREA OUB, FORT RICHARDSON, ALASKA

Dwg: PATH.AI	By: AR	Figure: 5-1
Project: E9408U	Date: 11-28-00	

TABLE 5-1

1,1,2,2-TETRACHLOROETHANE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B; FORT RICHARDSON, ALASKA

		Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B									
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW AQUIFER											
MW-2	AP-4012	ND (0.50)	ND (0.0010)	0.003	0.001	0.004	ND (0.001)	0.0017	ND (0.001)	0.00086	
MW-3	AP-4013	0.54	--	0.45	0.035	0.059	0.08	0.41	0.14	0.048	
MW-8	AP-4018	ND (0.50)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.002	ND (0.0002)	
MW-12	AP-3744	0.49	0.024	0.065	0.014	0.13	0.019	0.036	0.035	0.029	
MW-13	AP-3745	0.0011	0.0011	0.009	0.058	0.056	0.004	0.13	0.023	0.28 D	
MW-15	AP-3747	0.0063	--	0.004	0.002	0.004	0.012	0.013	0.027	0.0057	
MW-17	AP-3749	--	--	ND (0.001)	--	--	0.001	--	--	--	
MW-19	AP-3981	--	--	1.40	0.34	0.63	0.69	0.85	0.04	0.0003 J	
MW-20	AP-3982	--	--	0.01	0.15	0.12	0.059	0.04	0.024	ND (0.0002)	
MW-21	AP-3983	--	--	62.00	24.00	3.80	26.00	15.00	16.00	3.50 D	
MW-22	AP-3984	--	--	11.00	3.70	15.00	2.80	0.81	1.10	0.92 D	
MW-23	AP-3985	--	--	--	17.00	18.00	17.00	0.10	0.32	0.42 D	
MW-24	AP-3986	--	--	--	--	47.00	--	0.026	0.14	0.23 D	
PZ-1	AP-3989	--	1.40	19.00	1.00	3.30	1.80	0.83	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	1900	1000	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	21	9.1	19.00	15.00	6.00	10.00	14.00	2.60	3.20 D	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	71	--	--	6.00	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	0.082	--	0.047	0.054	0.029	0.018	0.047	0.071	0.033	
MW-6	AP-4016	0.52	--	0.008	0.013	0.019	0.005	0.013	0.006	0.0079	
MW-7	AP-4017	3.10	--	1.50	1.80	1.50	0.95	1.50	0.69	1.00 D	
MW-9	AP-4019	ND (0.50)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-16	AP-3748	ND (0.002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

D = The reported result is from a dilution.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 5-2

TETRACHLOROETHENE
 SUMMARY OF ANALYTICAL RESULTS
 OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B											
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW-AQUIFER											
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-3	AP-4013	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0003 J	
MW-6	AP-4018	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-12	AP-3744	0.00035	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0002 J	
MW-13	AP-3745	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0004 J	
MW-15	AP-3747	0.0021	--	0.002	0.001	0.003	0.006	0.006	0.009	0.0028	
MW-17	AP-3749	--	--	ND (0.001)	--	--	ND (0.001)	--	--	--	
MW-19	AP-3881	--	--	0.018	0.002	0.005	0.007	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-20	AP-3882	--	--	ND (0.001)	0.001	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-21	AP-3883	--	--	0.39	0.17	0.14	0.16	0.12	0.13	0.068	
MW-22	AP-3884	--	--	0.30	0.084	0.15	0.062	0.029	0.096	0.06	
MW-23	AP-3985	--	--	--	0.052	0.086	0.072	0.01	0.007	0.015	
MW-24	AP-3986	--	--	--	--	0.15	--	0.0092	0.013	0.013	
PZ-1	AP-3989	--	ND (0.10)	0.073	0.01	0.01	0.013	0.005	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	11	12.3	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	ND (0.2)	0.067	0.13	0.029	0.032	0.059	0.038	0.05	0.032	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	0.31	--	--	0.084	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	ND (0.002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-6	AP-4016	ND (0.002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-7	AP-4017	ND (0.02)	--	0.004	0.005	0.003	0.004	0.002	0.002	0.0021	
MW-9	AP-4019	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 5-3

CIS-1,2-DICHLOROETHENE
 SUMMARY OF ANALYTICAL RESULTS
 OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B		Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000
Well ID	API No.									
WELLS SCREENED IN SHALLOW AQUIFER										
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	*(0.38)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-3	AP-4013	0.028	--	*(0.046)	0.005	0.01	0.013	0.034	0.021	0.011
MW-8	AP-4018	ND (0.0002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-12	AP-3744	0.0091	0.0029	*(0.015)	0.003	0.004	0.002	0.0034	0.003	0.0032
MW-13	AP-3745	ND (0.0002)	ND (0.0010)	*(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.027
MW-15	AP-3747	0.015	--	*(0.028)	0.008	0.017	0.034	0.04	0.054	0.016
MW-17	AP-3749	--	--	ND *(0.001)	--	--	ND (0.001)	--	--	--
MW-19	AP-3981	--	--	*(0.076)	0.014	0.011	0.014	0.01	0.004	0.0014
MW-20	AP-3982	--	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-21	AP-3983	--	--	*(5.100)	1.50	2.20	2.40	2.50	3.10	1.40 D
MW-22	AP-3984	--	--	*(0.730)	0.16	0.73	0.18	0.058	0.16	0.079
MW-23	AP-3985	--	--	--	0.14	0.15	0.23	0.30	1.40	0.28 D
MW-24	AP-3986	--	--	--	--	0.22	--	0.34	0.76	0.28 D
PZ-1	AP-3989	--	0.17	*(1.100)	0.097	0.25	0.16	0.098	--	--
WELL SCREENED IN PERCHED AQUIFER										
MW-14	AP-3746	37.00	4.30	--	--	--	--	--	--	--
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER										
MW-5	AP-4015	ND (0.2)	0.26	*(0.650)	0.19	0.39	0.64	1.20	2.00	0.50 D
WELL SCREENED IN INTERMEDIATE AQUIFER										
MW-4	AP-4014	1.60	--	--	0.33	--	--	--	--	--
WELL SCREENED IN DEEP AQUIFER										
MW-1	AP-4011	0.0053	--	ND *(0.001)	0.005	0.006	0.004	0.0041	0.004	0.006
MW-6	AP-4016	0.0035	--	*(0.004)	0.002	0.002	0.002	ND (0.001)	0.001	0.0011
MW-7	AP-4017	0.28	--	ND *(0.001)	0.30	0.31	0.38	0.29	0.18	0.28 D
MW-9	AP-4019	ND (0.0002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000
 -- = Not Sampled
 ND = Analyte Not Detected (Detection Limit in Parentheses)
 * = Samples Analyzed for 1,2-Dichloroethene Total only (including cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCE)
 D = The reported result is from a dilution.

TABLE 5-4

TRANS-1,2-DICHLOROETHENE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B										
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000
WELLS SCREENED IN SHALLOW AQUIFER										
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	* (0.38)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-3	AP-4013	0.0038	--	* (0.046)	ND (0.001)	0.01	0.002	0.0042	0.002	0.0013
MW-8	AP-4018	ND (0.0002)	--	ND *(0.001)	ND (0.001)	0.002	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-12	AP-3744	0.001	ND (0.0010)	* (0.015)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00073
MW-13	AP-3745	ND (0.0002)	ND (0.0010)	* (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0016
MW-15	AP-3747	0.0041	--	* (0.028)	0.002	0.004	0.01	0.0093	0.015	0.0046
MW-17	AP-3749	--	--	ND *(0.001)	--	--	ND (0.001)	--	--	--
MW-19	AP-3981	--	--	* (0.076)	0.006	0.005	0.006	0.0013	ND (0.001)	ND (0.0002)
MW-20	AP-3982	--	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-21	AP-3983	--	--	* (5.100)	0.47	0.72	1.10	0.48	0.51	0.22 D
MW-22	AP-3984	--	--	* (0.730)	0.048	0.19	0.06	0.015	0.044	0.02
MW-23	AP-3985	--	--	--	0.053	0.058	0.094	0.036	0.07	0.029
MW-24	AP-3986	--	--	--	--	0.087	--	0.04	0.064	0.043
PZ-1	AP-3989	--	ND (0.10)	* (1.100)	0.031	0.065	0.06	0.028	--	--
WELL SCREENED IN PERCHED AQUIFER										
MW-14	AP-3746	12.00	1.60	--	--	--	--	--	--	--
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER										
MW-5	AP-4015	ND (0.2)	0.067	* (0.650)	0.066	0.11	0.34	0.11	0.19	0.091 D
WELL SCREENED IN INTERMEDIATE AQUIFER										
MW-4	AP-4014	0.41	--	--	0.075	--	--	--	--	--
WELL SCREENED IN DEEP AQUIFER										
MW-1	AP-4011	ND (0.002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00066
MW-6	AP-4016	ND (0.002)	--	* (0.004)	ND (0.001)	ND (0.001)	0.001	ND (0.001)	ND (0.001)	ND (0.0002)
MW-7	AP-4017	0.058	--	ND *(0.001)	0.082	0.074	0.075	0.059	0.049	0.056
MW-9	AP-4019	ND (0.0002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

* = Samples Analyzed for 1,2-Dichloroethene Total only (including cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCE)

D = The reported result is from a dilution.

TABLE 5-5

1,1-DICHLOROETHENE
 SUMMARY OF ANALYTICAL RESULTS
 OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B										
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000
WELLS SCREENED IN SHALLOW AQUIFER										
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	*(0.380)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-3	AP-4013	ND (0.00019)	--	*(0.046)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-8	AP-4018	ND (0.0002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-12	AP-3744	0.00014	ND (0.0010)	*(0.015)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-13	AP-3745	0.00026	ND (0.0010)	*(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00052
MW-15	AP-3747	0.00071	--	*(0.028)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.003	0.0006
MW-17	AP-3749	--	--	ND *(0.001)	--	--	ND (0.001)	--	--	--
MW-19	AP-3981	--	--	*(0.076)	ND (0.001)	ND (0.001)	ND (0.001)	0.003	ND (0.001)	ND (0.0002)
MW-20	AP-3982	--	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-21	AP-3983	--	--	*(5.100)	0.014	0.019	0.018	0.033	0.038	0.018
MW-22	AP-3984	--	--	*(0.730)	ND (0.001)	0.007	ND (0.010)	ND (0.001)	0.002	0.0019
MW-23	AP-3985	--	--	--	ND (0.001)	0.004	ND (0.010)	0.001	0.028	0.0095
MW-24	AP-3986	--	--	--	--	0.005	--	0.014	0.02	0.0074
PZ-1	AP-3989	--	ND (0.10)	*(1.100)	ND (0.001)	0.003	0.002	ND (0.001)	--	--
WELL SCREENED IN PERCHED AQUIFER										
MW-14	AP-3746	ND (0.5)	ND (1.0)	--	--	--	--	--	--	--
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER										
MW-5	AP-4015	ND (0.2)	ND (0.0010)	*(0.650)	ND (0.001)	0.005	ND (0.010)	0.01	0.021	0.0057
WELL SCREENED IN INTERMEDIATE AQUIFER										
MW-4	AP-4014	ND (0.2)	--	--	0.003	--	--	--	--	--
WELL SCREENED IN DEEP AQUIFER										
MW-1	AP-4011	ND (0.002)	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-6	AP-4016	ND (0.002)	--	*(0.004)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-7	AP-4017	ND (0.02)	--	ND *(0.001)	0.003	0.005	0.005	0.003	0.003	0.0035
MW-9	AP-4019	0.0012	--	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND *(0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

* = Samples Analyzed for 1,2-Dichloroethene Total only (including cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCE)

TABLE 5-6

BENZENE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B											
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW AQUIFER											
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-3	AP-4013	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-8	AP-4018	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-12	AP-3744	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-13	AP-3745	0.00034	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-15	AP-3747	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-17	AP-3749	--	--	ND (0.001)	--	--	ND (0.001)	--	--	--	
MW-19	AP-3981	--	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-20	AP-3982	--	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-21	AP-3983	--	--	0.094	0.021	0.021	0.033	0.012	0.017	0.0061	
MW-22	AP-3984	--	--	0.009	0.004	0.017	ND (0.010)	ND (0.001)	0.004	0.002 B	
MW-23	AP-3985	--	--	--	0.001	0.002	ND (0.010)	ND (0.001)	ND (0.001)	0.0003 JB	
MW-24	AP-3986	--	--	--	--	0.004	--	ND (0.001)	ND (0.001)	0.0004 JB	
PZ-1	AP-3989	--	ND (0.10)	0.022	0.002	0.003	0.002	ND (0.001)	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	2.9	3.3	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	ND (0.2)	0.0013	0.004	ND (0.001)	ND (0.001)	ND (0.010)	ND (0.001)	ND (0.001)	0.00053 B	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	ND (0.2)	--	--	0.002	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	ND (0.002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-6	AP-4016	ND (0.002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-7	AP-4017	ND (0.02)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0003 JB	
MW-9	AP-4019	0.00073	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

B = Analyte was found in the blank at a level that is significant relative to the sample result.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 5-7

CARBON TETRACHLORIDE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B											
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW AQUIFER											
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-3	AP-4013	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-8	AP-4018	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-12	AP-3744	0.022	0.0011	0.002	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00071	
MW-13	AP-3745	0.00038	ND (0.0010)	0.003	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0003 J	
MW-15	AP-3747	0.0014	--	ND (0.001)	ND (0.001)	ND (0.001)	0.003	0.003	0.004	0.001	
MW-17	AP-3749	--	--	ND (0.001)	--	--	ND (0.001)	--	--	--	
MW-19	AP-3981	--	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-20	AP-3982	--	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-21	AP-3983	--	--	ND (0.020)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-22	AP-3984	--	--	0.011	0.01	0.006	ND (0.010)	0.0037	0.007	0.005	
MW-23	AP-3985	--	--	--	ND (0.001)	ND (0.001)	ND (0.010)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-24	AP-3986	--	--	--	--	ND (0.001)	--	ND (0.001)	ND (0.001)	ND (0.0002)	
PZ-1	AP-3989	--	ND (0.10)	ND (0.020)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	2.6	2.7	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	ND (0.2)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.010)	ND (0.001)	ND (0.001)	0.0003 J	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	ND (0.2)	--	--	0.009	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	ND (0.002)	--	ND (0.001)	0.001	ND (0.001)	ND (0.001)	0.001	0.001	0.0012	
MW-6	AP-4016	ND (0.002)	--	0.001	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-7	AP-4017	ND (0.02)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-9	AP-4019	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-16	AP-3748	ND (0.0002)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

J = The result is an estimated concentration that is less than the MPL but greater than or equal to the MDL.

TABLE 5-8

1,1,2-TRICHLOROETHANE
 SUMMARY OF ANALYTICAL RESULTS
 OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B											
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW AQUIFER											
MW-2	AP-4012	ND (0.50)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	
MW-3	AP-4013	0.0023	--	0.004	ND (0.001)	ND (0.001)	ND (0.001)	0.002	0.001	0.00084	
MW-8	AP-4018	ND (0.50)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	
MW-12	AP-3744	0.00078	ND (0.0010)	0.002	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0005 J	
MW-13	AP-3745	ND (0.50)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0031	
MW-15	AP-3747	0.0013	--	0.003	ND (0.001)	0.002	0.005	0.004	0.005	0.0018	
MW-17	AP-3749	--	--	ND (0.001)	--	--	ND (0.001)	--	--	--	
MW-19	AP-3981	--	--	0.014	ND (0.001)	0.003	0.005	0.02	ND (0.001)	ND (0.0001)	
MW-20	AP-3982	--	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	
MW-21	AP-3983	--	--	0.42	0.19	0.20	0.18	0.12	0.12	0.038	
MW-22	AP-3984	--	--	0.043	0.011	0.41	ND (0.010)	0.004	0.007	0.0067	
MW-23	AP-3985	--	--	--	0.076	0.077	0.07	0.001	0.011	0.0048	
MW-24	AP-3986	--	--	--	--	0.15	--	0.008	0.006	0.0051	
PZ-1	AP-3989	--	ND (0.10)	0.12	0.009	0.022	0.015	0.008	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	ND (1.3)	1.0	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	ND (0.50)	0.45	0.10	0.025	0.031	0.059	0.021	0.031	0.013	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	ND (0.50)	--	--	0.036	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	ND (0.005)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00094	
MW-6	AP-4016	ND (0.005)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0002 J	
MW-7	AP-4017	ND (0.05)	--	0.024	0.028	0.02	0.021	0.021	0.012	0.018	
MW-9	AP-4019	ND (0.50)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	
MW-16	AP-3748	ND (0.50)	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0001)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 6-9

TRICHLOROETHENE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B											
Well ID	API No.	Oct 1995	Nov 1996	Nov 1997	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000	Oct 2000	
WELLS SCREENED IN SHALLOW AQUIFER											
MW-2	AP-4012	ND (0.0002)	ND (0.0010)	0.001	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-3	AP-4013	0.26	--	0.27	0.037	0.062	0.11	0.24	0.13	0.082	
MW-8	AP-4018	ND (0.0002)	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	
MW-12	AP-3744	0.16	0.07	0.19	0.058	0.063	0.058	0.079	0.058	0.054	
MW-13	AP-3745	0.0067	0.0041	0.018	0.008	0.01	0.007	0.012	0.008	0.11 D	
MW-15	AP-3747	0.27	--	0.32	0.14	0.26	0.73	0.87	1.2	0.25 D	
MW-17	AP-3749	--	--	ND (0.001)	--	--	ND (0.001)	--	--	--	
MW-19	AP-3981	--	--	0.95	0.11	0.17	0.28	0.021	0.016	0.0013 B	
MW-20	AP-3982	--	--	0.012	0.018	0.012	0.017	0.001	ND (0.001)	ND (0.0002)	
MW-21	AP-3983	--	--	22.00	12.00	1.10	12.00	9.10	11	3.10 D	
MW-22	AP-3984	--	--	8.70	2.10	7.800	1.70	1.60	4.6	2.30 D	
MW-23	AP-3985	--	--	--	2.20	3.20	3.10	0.97	1.7	0.68 D	
MW-24	AP-3986	--	--	--	--	3.70	--	0.97	0.87	0.53 D	
PZ-1	AP-3989	--	0.94	5.40	0.93	1.30	0.74	0.68	--	--	
WELL SCREENED IN PERCHED AQUIFER											
MW-14	AP-3746	220	186	--	--	--	--	--	--	--	
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER											
MW-5	AP-4015	4.8	3.1	8.00	3.00	3.70	5.40	3.40	4.5	2.20 D	
WELL SCREENED IN INTERMEDIATE AQUIFER											
MW-4	AP-4014	14.00	--	--	4.10	--	--	--	--	--	
WELL SCREENED IN DEEP AQUIFER											
MW-1	AP-4011	0.043	--	0.03	0.034	0.029	0.035	0.034	0.038	0.038	
MW-6	AP-4016	0.13	--	0.086	0.025	0.026	0.073	0.02	0.025	0.013	
MW-7	AP-4017	1.00	--	1.30	0.92	0.85	1.10	0.86	0.66	0.73 D	
MW-9	AP-4019	0.00091	--	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.0002 J,B	
MW-16	AP3748	0.00031	ND (0.0010)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0002)	

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

B = Analyte was found in the blank at a level that is significant relative to the sample result.

D = The reported result is from a dilution.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 5-10

VINYL CHLORIDE
SUMMARY OF ANALYTICAL RESULTS
OPERABLE UNIT B, FORT RICHARDSON, ALASKA

Volatile Organic Compounds Detected (mg/l) in Groundwater Samples Using EPA Method 8260B						
Well ID	API No.	June 1998	Oct 1998	Mar 1999	Oct 1999	April 2000
WELLS SCREENED IN SHALLOW AQUIFER						
MW-2	AP-4012	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-3	AP-4013	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-8	AP-4018	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-12	AP-3744	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-13	AP-3745	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-15	AP-3747	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-17	AP-3749	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-19	AP-3981	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-20	AP-3982	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-21	AP-3983	ND (0.001)	0.009	0.002	0.004	0.0028
MW-22	AP-3984	ND (0.001)	ND (0.001)	ND (0.010)	ND (0.001)	ND (0.0003)
MW-23	AP-3985	ND (0.001)	ND (0.001)	ND (0.010)	0.003	0.0017
MW-24	AP-3986	ND (0.001)	ND (0.001)	ND (0.001)	0.002	0.0016
PZ-1	AP-3989	ND (0.001)	ND (0.100)	ND (0.001)	ND (0.001)	ND (0.001)
WELL SCREENED IN PERCHED AQUIFER						
MW-14	AP-3746	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
WELL SCREENED IN SHALLOW-INTERMEDIATE AQUIFER						
MW-5	AP-4015	ND (0.001)	ND (0.001)	ND (0.010)	0.001	0.00097
WELL SCREENED IN INTERMEDIATE AQUIFER						
MW-4	AP-4014	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)
WELL SCREENED IN DEEP AQUIFER						
MW-1	AP-4011	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-6	AP-4016	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-7	AP-4017	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.00089
MW-9	AP-4019	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)
MW-16	AP-3748	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.0003)

NOTES: MW-14 was dry in 1997, 1998, 1999, and 2000

-- = Not Sampled

ND = Analyte Not Detected (Detection Limit in Parentheses)

TABLE 5-11

**SAMPLE CROSS REFERENCE SHEET
OCTOBER 2000 GROUNDWATER SAMPLES**

OPERABLE UNIT B, POLELINE ROAD DISPOSAL AREA FORT RICHARDSON, ALASKA				
Well ID	API Number	Field Sample ID	Laboratory Sample ID	Sample Type
MW-01	AP-4011	00-PRDA-506-WA	K20814106	ES
MW-02	AP-4012	00-PRDA-507-WA	K20814107	ES
MW-03	AP-4013	00-PRDA-511-WA	K20814111	ES
MW-05	AP-4015	00-PRDA-513-WA	K20814113	ES
MW-06	AP-4016	00-PRDA-520-WA	K20814121	ES
MW-07	AP-4017	00-PRDA-512-WA	K20814112	ES
MW-08	AP-4018	00-PRDA-510-WA	K20814110	ES
MW-09	AP-4019	00-PRDA-503-WA	K20814103	ES
MW-09	AP-4019	00-PRDA-504-WA	K20814104	Dup
MW-12	AP-3744	00-PRDA-505-WA	K20814105	ES
MW-13	AP-3745	00-PRDA-509-WA	K20814109	ES
MW-15	AP-3747	00-PRDA-502-WA	K20814102	ES
MW-16	AP-3748	00-PRDA-501-WA	K20814101	ES
MW-19	AP-3981	00-PRDA-516-WA	K20814117	ES
MW-20	AP-3982	00-PRDA-508-WA	K20814108	ES
MW-21	AP-3983	00-PRDA-514-WA	K20814114	ES
MW-21	AP-3983	00-PRDA-515-WA	K20814115	Dup
MW-22	AP-3984	00-PRDA-519-WA	K20814120	ES
MW-23	AP-3985	00-PRDA-517-WA	K20814118	ES
MW-24	AP-3986	00-PRDA-518-WA	K20814119	ES
EB		00-PRDA-516-WR	K20814116	EB

Notes: Dup = duplicate
ES = Environmental sample
EB = Equipment blank

TABLE 5-12

**VOLATILE ORGANIC COMPOUNDS THAT EXCEEDED MCLS
OCTOBER 2000 GROUNDWATER SAMPLES**

OPERABLE UNIT B, POLELINE ROAD DISPOSAL AREA FORT RICHARDSON, ALASKA				
Compound	MCL (mg/L)	Concentration* (mg/L)	Monitoring Well ID	API No.
Benzene	0.005	0.0061	MW-21	AP-3983
Carbon Tetrachloride	0.005	0.005	MW-22	AP-3984
1,1-Dichloroethene	0.007	0.018	MW-21	AP-3983
		0.0095	MW-23	AP-3985
		0.0074	MW-24	AP-3986
cis-1,2-Dichloroethene	0.07	0.50	MW-5	AP-4015
		0.26	MW-7	AP-4017
		1.40	MW-21	AP-3983
		0.079	MW-22	AP-3984
		0.28	MW-23	AP-3985
		0.28	MW-24	AP-3986
trans-1,2-Dichloroethene	0.1	0.22	MW-21	AP-3983
Tetrachloroethene	0.005	0.032	MW-5	AP-4015
		0.068	MW-21	AP-3983
		0.06	MW-22	AP-3984
		0.015	MW-23	AP-3985
		0.013	MW-24	AP-3986
1,1,2-Trichloroethane	0.005	0.013	MW-5	AP-4015
		0.018	MW-7	AP-4017
		0.036	MW-21	AP-3983
		0.0067	MW-22	AP-3984
		0.0051	MW-24	AP-3986
Trichloroethene	0.005	0.038	MW-1	AP-4011
		0.062	MW-3	AP-4013
		2.20	MW-5	AP-4015
		0.013	MW-6	AP-4016
		0.73	MW-7	AP-4017
		0.054	MW-12	AP-3744
		0.11	MW-13	AP-3745
		0.25	MW-15	AP-3747
		3.10	MW-21	AP-3983
		2.30	MW-22	AP-3984
		0.68	MW-23	AP-3985
		0.53	MW-24	AP-3986
Vinyl Chloride	0.002	0.0028	MW-21	AP-3983

NOTES:

mg/L = milligram per liter

- * Only those concentrations that exceed Maximum Contaminant Levels (MCLs) are shown

TABLE 5-13

**MONITORING WELL HEADSPACE VALUES
OCTOBER 2000 GROUNDWATER SAMPLES**

OPERABLE UNIT B FORT RICHARDSON, ALASKA			
Monitoring Well	API No.	Saturated Interval	Headspace Measurement (ppm)
MW-2	AP-4012	Shallow	0.0
MW-3	AP-4013	Shallow	0.0
MW-8	AP-4018	Shallow	0.0
MW-12	AP-3744	Shallow	0.0
MW-13	AP-3745	Shallow	0.0
MW-15	AP-3747	Shallow	0.0
MW-17	AP-3749	Shallow	Not Sampled
MW-19	AP-3981	Shallow	0.0
MW-20	AP-3982	Shallow	0.0
MW-21	AP-3983	Shallow	2.6
MW-22	AP-3984	Shallow	117.5
MW-23	AP-3985	Shallow	0.0
MW-24	AP-3986	Shallow	0.0
PZ-1	AP-3989	Shallow	0.0
MW-14	AP-3746	Perched	Not Sampled
MW-5	AP-4015	Shallow-Intermediate	0.0
MW-4	AP-4014	Intermediate	0.0
MW-1	AP-4011	Deep	Not Sampled
MW-6	AP-4016	Deep	0.0
MW-7	AP-4017	Deep	0.0
MW-9	AP-4019	Deep	Not Sampled
MW-16	AP-3748	Deep	0.0

TABLE 5-14
GROUNDWATER ELEVATIONS POLELINE ROAD DISPOSAL AREA

OPERABLE UNIT B		Groundwater Elevation in Feet																				
FORT RICHARDSON, ALASKA																						
Monitoring Well	API No.	Saturated Interval	11/1/95	12/4/95	1/3/96	2/1/96	3/1/96	4/1/96	5/1/96	6/3/96	7/1/96	8/2/96	9/3/96	10/2/96	11/4/96	11/10/97	6/8/98	10/21/98	3/11/99	10/21/99	3/13/00	10/09/00
MW-2	AP-4012	Shallow	274.11	273.43	272.69	272.30	272.08	271.88	271.62	271.80	271.76	271.61	271.37	271.22	271.01	273.31	275.22	273.97	273.46	272.69	271.85	273.81
MW-3	AP-4013	Shallow	274.01	272.84	271.55	270.76	269.97	269.49	268.33	268.42	269.41	269.38	269.28	269.26	NS	272.56	275.05	274.30	271.06	271.86	270.32	274.12
MW-8	AP-4018	Shallow	276.97	275.04	275.20	274.91	274.15	273.84	273.59	273.65	273.60	273.53	273.45	273.34	NS	273.35	277.16	276.45	273.56	274.59	273.72	276.50
MW-12	AP-3744	Shallow	273.75	273.04	272.24	271.76	271.38	271.10	270.70	270.92	270.82	270.57	270.29	270.13	269.94	272.84	274.82	273.82	271.50	271.86	270.94	275.46
MW-13	AP-3745	Shallow	275.88	275.21	274.46	273.80	273.52	273.22	272.86	273.02	272.89	272.96	272.91	272.83	272.73	272.79	276.27	275.72	272.99	274.08	273.16	276.70
MW-15	AP-3747	Shallow	271.82	270.83	269.83	269.29	268.22	268.22	267.17	267.20	267.03	266.89	266.21	265.74	265.03	271.89	274.87	272.12	268.88	270.00	268.3	271.72
MW-17	AP-3748	Shallow	265.40	264.54	263.69	263.05	262.28	262.28	262.36	262.70	262.64	262.37	262.15	261.97	261.60	264.86	261.08	264.97	262.93	264.28	NS	NS
MW-19	AP-3981	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	276.82	276.29	277.46	274.84	275.88	274.04	277.60
MW-20	AP-3982	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	272.33	274.44	273.31	271.4	271.76	271.04	273.12
MW-21	AP-3983	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	274.15	275.40	275.09	272.4	273.45	272.27	275.07
MW-22	AP-3984	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	277.27	276.65	277.43	275.51	275.71	274.98	276.94
MW-23	AP-3985	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	276.05	277.44	274.88	275.88	274.36	277.21
MW-24	AP-3985	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	276.13	277.27	NS	275.37	274.3	276.89
PZ-1	AP-3989	Shallow	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	271.61	273.91	274.54	272.34	272.79	272.2	274.66	
MW-14	AP-3746	Patched	260.83	269.93	269.05	268.37	267.71	267.28	266.80	266.38	266.89	266.37	265.08	269.72	268.91	273.91	Dry	265.07	Dry	265.28	Dry	
MW-5	AP-4015	Shallow-Intermediate	277.44	276.59	275.33	275.15	274.60	274.24	273.85	274.10	274.16	274.00	273.88	273.76	273.64	276.30	276.52	275.93	272.82	275.72	274.06	276.79
MW-4	AP-4014	Intermediate	237.77	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	238.33	243.25	Dry	Dry	Dry	238.90	
MW-1	AP-4011	Deep	173.27	173.26	173.22	173.28	173.18	173.32	Dry	173.29	173.16	173.24	173.16	173.32	NS	173.39	173.95	173.42	173.43	173.82	173.27	173.01
MW-6	AP-4016	Deep	177.36	177.24	177.40	177.53	177.32	177.68	177.35	177.63	177.33	177.44	177.42	177.71	NS	177.54	177.04	177.28	177.76	177.82	177.61	177.22
MW-7	AP-4017	Deep	226.71	226.37	226.30	226.33	226.12	226.40	226.08	226.30	225.97	226.09	226.09	226.33	NS	226.53	226.85	227.09	226.85	227.54	227.81	227.67
MW-9	AP-4019	Deep	Dry	160.16	160.13	159.84	Dry	159.09	Dry	Dry	158.08	158.10	158.08	158.02	NS	NS	157.82	160.21	159.35	158.37	158.06	159.90
MW-16	AP-3748	Deep	162.38	162.19	162.11	162.11	161.56	161.39	160.51	160.41	160.00	160.17	160.12	160.30	160.00	169.46	160.02	162.20	161.47	160.54	160.22	161.82

Notes:
Dry = Dry well
NA = Not Available
NS = Not Sampled

⊕ MW-16
(ND)

⊕ MW-15
(0.0057)

⊕ MW-9
(ND)

TREES

TREES

AREA A-4

⊕ MW-6
(0.0079)

⊕ MW-4
(Dry)

⊕ MW-12
(0.029)

⊕ MW-20
(ND)

⊕ PZ-1

⊕ MW-1
(0.033)

⊕ MW-2
(0.00066)

HILL

⊕ MW-14 (Dry)

⊕ MW-21
(3.50)

AREA A-2

AREA A-1

AREA A-3

⊕ MW-22
(0.92)

⊕ MW-13
(0.28)

⊕ MW-24
(0.23)

⊕ MW-23
(0.42)

⊕ MW-19
(0.0003)

⊕ MW-5
(3.2)

⊕ MW-7
(1.00)

⊕ MW-3
(0.048)

TREES

WETLAND

⊕ MW-8
(ND)

LEGEND:

⊕ Monitoring Wells
Sampled October 2000

⊕ Monitoring Wells Not
Sampled October 2000

MW-1 (0.048) Monitoring Well Location ID with
Corresponding Analytical Result
for 1,1,2,2-tetrachloroethane in mg/L

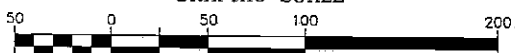
(ND) Not Detected

PZ-1 Piezometer Well Location

0.5 Isoconcentration Contour Line

⊕ MW-17 is along Poleline Road,
southwest of wetland.

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.



1, 1, 2, 2- TETRACHLOROETHANE
ISOCONCENTRATION MAP
POLELINE ROAD DISPOSAL AREA
OUB, FORT RICHARDSON, ALASKA

Dwg: FT_RICH_1002

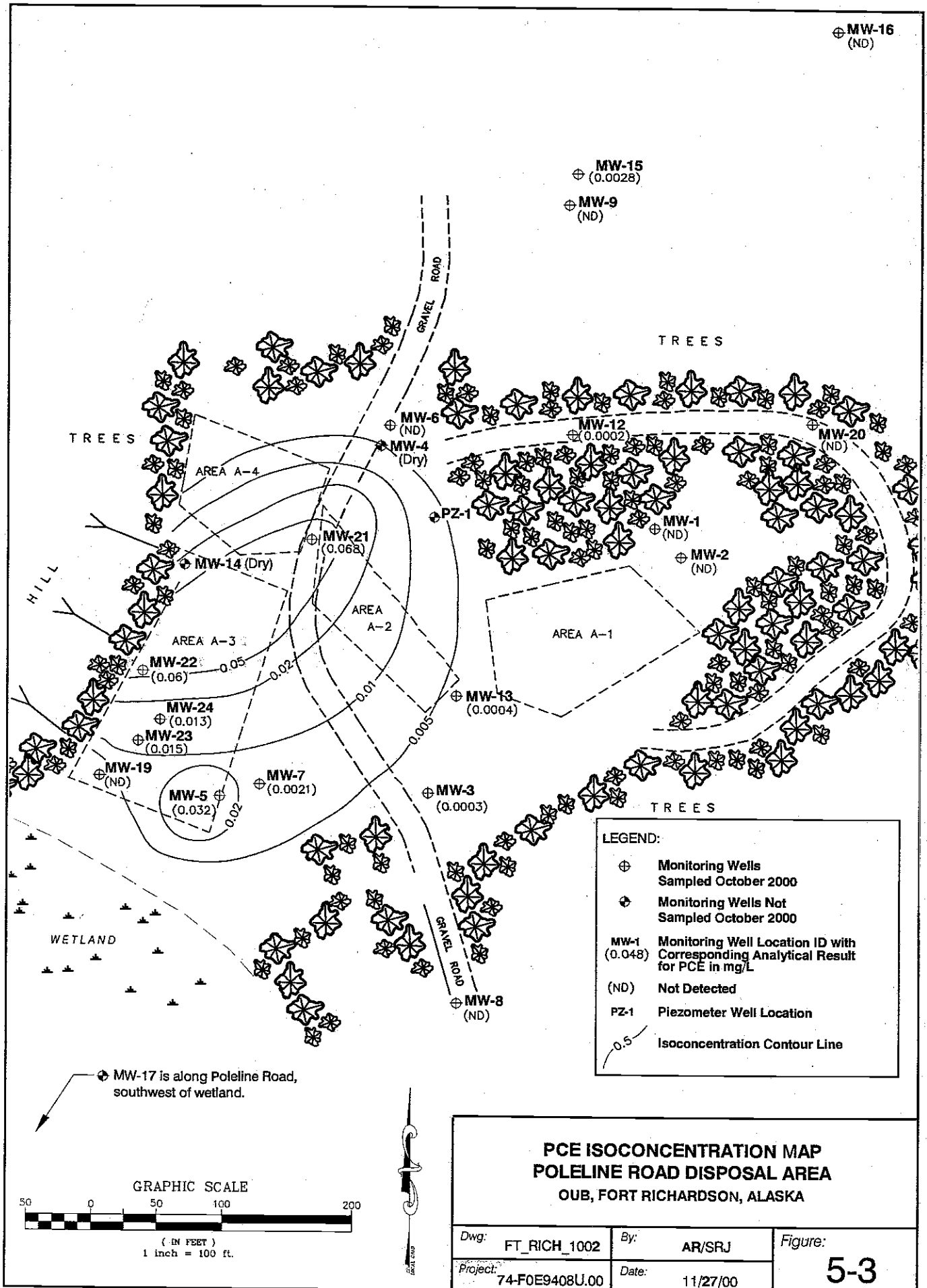
By: AR/SRJ

Figure:

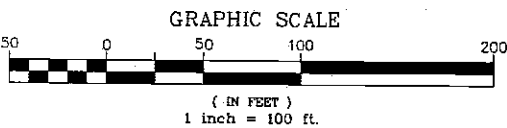
Project: 74-F0E9408U.00

Date: 11/27/00

5-2



⊕ MW-17 is along Poleline Road, southwest of wetland.



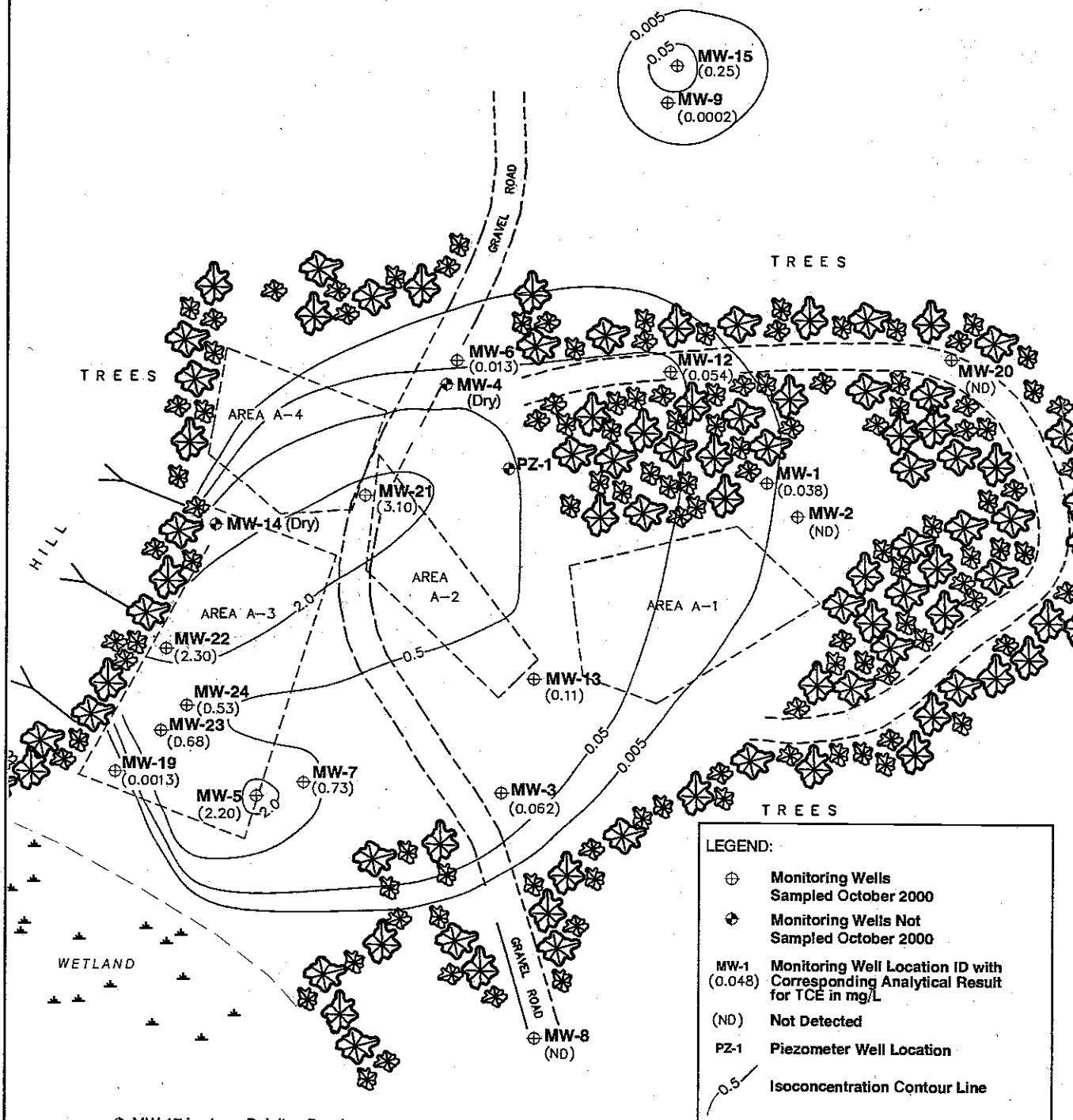
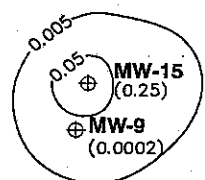
LEGEND:

- ⊕ Monitoring Wells Sampled October 2000
- ⊕ Monitoring Wells Not Sampled October 2000
- MW-1 (0.048) Monitoring Well Location ID with Corresponding Analytical Result for PCE in mg/L
- (ND) Not Detected
- PZ-1 Piezometer Well Location
- 0.5 Isoconcentration Contour Line

**PCE ISOCONCENTRATION MAP
 POLELINE ROAD DISPOSAL AREA
 OUB, FORT RICHARDSON, ALASKA**

Dwg: FT_RICH_1002	By: AR/SRJ	Figure: 5-3
Project: 74-F0E9408U.00	Date: 11/27/00	

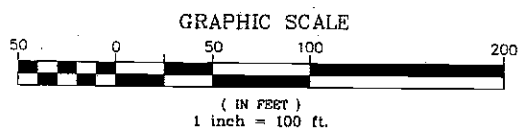
⊕ MW-16
(ND)



LEGEND:

- ⊕ Monitoring Wells Sampled October 2000
- ⊕ Monitoring Wells Not Sampled October 2000
- MW-1 (0.048) Monitoring Well Location ID with Corresponding Analytical Result for TCE in mg/L
- (ND) Not Detected
- PZ-1 Piezometer Well Location
- 0.5 Isoconcentration Contour Line

⊕ MW-17 is along Poleline Road, southwest of wetland.



**TCE ISOCONCENTRATION MAP
POLELINE ROAD DISPOSAL AREA
OUB, FORT RICHARDSON, ALASKA**

Dwg: FT_RICH_1002	By: AR/SRJ	Figure: 5-4
Project: 74-F0E9408U.00	Date: 11/27/00	

Nine rounds of groundwater data have been collected from October 1995 through October 2000. During this time, several remedial activities occurred at the site that may have impacted the concentration of contaminants in the groundwater (see Section 3.6). Variability in the concentration of contaminants from one round to the next has made it difficult to identify clear trends. However, in groundwater collected from several wells, the concentrations of primary VOCs (1,1,2,2-tetrachloroethane, TCE, and PCE) were reduced as a result of the 1999 Six-Phase Heating test. The impact of the 1999 test was limited to a small area (5,500 ft²). Because of the slow groundwater flow at the site, it may take from several months to several years for the concentration of contaminants in groundwater to be impacted at wells away from the test area. Three rounds of groundwater samples have been collected since the system was shut off in October 1999.

The concern has been raised that the solvents left in the soil, treated by SPH in 1999, may continue to impact the groundwater. The concentration of solvents that were observed in the groundwater samples collected for the October 2000 round generally were similar to the concentrations reported in the two previous sampling rounds. The concentration of 1,1,2,2-tetrachloroethane decreased significantly in MW-19 (from 0.04 mg/l to 0.0003 mg/l) and slightly in MW-22 (from 1.10 mg/l to 0.92 mg/l). Slight increases were observed in the concentration of 1,1,2,2-tetrachloroethane in MW-23 (from 0.32 mg/l to 0.42 mg/l) and MW-24 (0.14 mg/l to 0.23 mg/l). Wells MW-19, MW-22, MW-23, and MW-24 are located within or immediately adjacent to the area treated in 1999. The concentration of TCE was lower in the October 2000 samples collected from these wells compared those samples collected in March 2000. This data suggests that solvents remaining in the soil are not having a significant impact on groundwater concentrations.

SECTION SEVEN

References

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Appendix A
Laboratory Reports

Appendix A
Laboratory Reports

October 2000 Groundwater Samples

Well ID	MW-16	MW-15	MW-9
API Number	AP3748	AP3747	AP4019
Date Collected	20001013	20001010	20001010
Matrix	WG	WG	WG
Sample ID	00-PRDA-501-WA	00-PRDA-502-WA	00-PRDA-503-WA
Laboratory	CASK	CASK	CASK
Lab Sample ID	K20814101	K20814102	K20814103

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,1,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2-Trichloroethane	SW8260B	ug/L		ND[0.1]	5.7			ND[0.1]
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]	1.8			ND[0.1]
1,1-Dichloroethene	SW8260B	ug/L		ND[0.2]	0.6			ND[0.2]
1,1-Dichloropropene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.4]				ND[0.4]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]				ND[0.3]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]				ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[1]				ND[1]
1,2-Dibromoethane	SW8260B	ug/L		ND[0.08]				ND[0.08]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.09]				ND[0.09]
1,2-Dichloroethane	SW8260B	ug/L		ND[0.2]	0.2			ND[0.2]
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.08]				ND[0.08]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.09]				ND[0.09]
2-Butanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
2-Chlorotoluene	SW8260B	ug/L		ND[4]				ND[4]
2-Hexanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]				ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.09]				ND[0.09]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
Acetone	SW8260B	ug/L		ND[3]				ND[3]
Benzene	SW8260B	ug/L		ND[3]				ND[3]
Bromobenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
Bromochloromethane	SW8260B	ug/L		ND[0.1]				ND[0.1]
Bromodichloromethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Bromoform	SW8260B	ug/L		ND[0.09]				ND[0.09]
Bromomethane	SW8260B	ug/L		ND[0.3]				ND[0.3]
Carbon disulfide	SW8260B	ug/L		ND[0.3]				ND[0.3]
	SW8260B	ug/L		ND[0.2]				ND[0.2]

October 2000 Groundwater Samples

Well ID	MW-16	MW-15	MW-9
API Number	AP3748	AP3747	AP4019
Date Collected	20001013	20001010	20001010
Matrix	WG	WG	WG
Sample ID	00-PRDA-501-WA	00-PRDA-502-WA	00-PRDA-503-WA
Laboratory	CASK	CASK	CASK
Lab Sample ID	K20814101	K20814102	K20814103

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chlorobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.07]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Tetrachloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Toluene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Trichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Vinyl chloride	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
cis-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
cis-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
m,p-Xylene (Sum of Isomers)	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Butylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
n-Propylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
o-Xylene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
sec-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]

October 2000 Groundwater Samples

Well ID MW-9 MW-12 MW-1
 API Number AP4019 AP3744 AP4011
 Date Collected 20001010 20001010 20001010
 Matrix WG WG WG
 Sample ID 00-PRDA-503-WA-DUP 00-PRDA-505-WA 00-PRDA-506-WA
 Laboratory CASK CASK CASK
 Lab Sample ID K20814104 K20814105 K20814106

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,1,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2-Trichloroethane	SW8260B	ug/L		ND[0.1]	29	ND[0.2]	33	
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]	0.5	ND[0.1]	0.94	
1,1-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.1]
1,1-Dichloropropene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.2]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.3]		ND[0.4]		ND[0.4]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.3]		ND[0.3]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2-Dibromoethane	SW8260B	ug/L		ND[1]		ND[1]		ND[1]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
1,2-Dichloroethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
2-Butanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
2-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
2-Hexanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Acetone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Benzene	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Bromobenzene	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Bromochloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Bromodichloromethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Bromoform	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Bromomethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Carbon disulfide	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]

October 2000 Groundwater Samples

Well ID: MW-9 MW-12 MW-1
 API Number AP4019 AP3744 AP4011
 Date Collected 20001010 20001010 20001010
 Matrix WG WG WG
 Sample ID 00-PRDA-503-WA-DUP 00-PRDA-505-WA 00-PRDA-506-WA
 Laboratory CASK CASK CASK
 Lab Sample ID K20814104 K20814105 K20814106

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]				
Chlorobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]	1.2	ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L		ND[0.1]				
Chloromethane	SW8260B	ug/L		ND[0.2]			0.1	ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.07]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Tetrachloroethene	SW8260B	ug/L		ND[0.2]			0.2	ND[0.1]
Toluene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Trichloroethene	SW8260B	ug/L		ND[0.2]			54	ND[0.2]
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Vinyl chloride	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
cis-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]			3.2	ND[0.2]
cis-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
m,p-Xylene (Sum of isomers)	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Butylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
n-Propylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
o-Xylene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
sec-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]

October 2000 Groundwater Samples

Well ID MW-2 MW-13
 API Number AP4012 AP3745
 Date Collected 20001013 20001011
 Matrix WG WG
 Sample ID 00-PRDA-507-WA 00-PRDA-508-WA
 Laboratory CASK CASK
 Lab Sample ID K20814107 K20814108 K20814109

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L		=			280	=
1,1,2-Trichloroethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
1,1-Dichloropropene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2-Dibromoethane	SW8260B	ug/L		ND[1]		ND[1]		ND[1]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
1,2-Dichloroethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
2-Butanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
2-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
2-Hexanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Acetone	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Benzene	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Bromobenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Bromochloromethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Bromodichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Bromoform	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Bromomethane	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Carbon disulfide	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]

October 2000 Groundwater Samples

Well ID MW-2
 API Number AP4012
 Date Collected 20001013
 Matrix WG
 Sample ID 00-PRDA-507-WA
 Laboratory CASK
 Lab Sample ID K20814107

Well ID MW-13
 API Number AP3745
 Date Collected 20001011
 Matrix WG
 Sample ID 00-PRDA-508-WA
 Laboratory CASK
 Lab Sample ID K20814108

Well ID MW-20
 API Number AP3982
 Date Collected 20001011
 Matrix WG
 Sample ID 00-PRDA-509-WA
 Laboratory CASK
 Lab Sample ID K20814109

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chlorobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloromethane	SW8260B	ug/L		ND[0.2]	0.4	ND[0.2]		ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.07]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Tetrachloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Toluene	SW8260B	ug/L		ND[0.2]	0.4	ND[0.2]		ND[0.2]
Trichloroethene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]	110	ND[0.2]		ND[0.2]
Vinyl chloride	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
cis-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
cis-1,3-Dichloropropene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
m,p-Xylene (Sum of isomers)	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
n-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Propylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
o-Xylene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
sec-Butylbenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]

October 2000 Groundwater Samples

Well ID MW-8 MW-3 MW-7
 API Number AP4018 AP4013 AP4017
 Date Collected 20001011 20001011 20001011
 Matrix WG WG WG
 Sample ID 00-PRDA-510-WA 00-PRDA-511-WA 00-PRDA-512-WA
 Laboratory CASK CASK CASK
 Lab Sample ID K20814110 K20814111 K20814112

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,1,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2-Trichloroethane	SW8260B	ug/L		ND[0.1]			1000	
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]			18	
1,1-Dichloroethene	SW8260B	ug/L		ND[0.2]				ND[0.1]
1,1-Dichloropropene	SW8260B	ug/L		ND[0.2]				
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.4]				ND[0.2]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.3]				ND[0.4]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]				ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.3]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[1]				ND[0.2]
1,2-Dibromoethane	SW8260B	ug/L		ND[0.08]				ND[1]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.09]				ND[0.08]
1,2-Dichloroethane	SW8260B	ug/L		ND[0.2]				ND[0.09]
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,3-Dichloropropane	SW8260B	ug/L		ND[0.2]				ND[0.2]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.08]				ND[0.08]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.09]				ND[0.09]
2-Butanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
2-Chlorotoluene	SW8260B	ug/L		ND[4]				ND[4]
2-Hexanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]				ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.09]				ND[0.09]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.2]				ND[0.2]
Acetone	SW8260B	ug/L		ND[3]				ND[3]
Benzene	SW8260B	ug/L		ND[3]				ND[3]
Bromobenzene	SW8260B	ug/L		ND[0.2]			0.3	
Bromochloromethane	SW8260B	ug/L		ND[0.1]				ND[0.1]
Bromodichloromethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Bromoform	SW8260B	ug/L		ND[0.09]				ND[0.09]
Bromomethane	SW8260B	ug/L		ND[0.3]				ND[0.3]
Carbon disulfide	SW8260B	ug/L		ND[0.3]				ND[0.3]
				ND[0.2]				ND[0.2]

October 2000 Groundwater Samples

Well ID MW-8 MW-3 MW-7
 API Number AP4018 AP4017
 Date Collected 20001011 20001011 20001011
 Matrix WG WG WG
 Sample ID 00-PRDA-510-WA 00-PRDA-511-WA 00-PRDA-512-WA
 Laboratory CASK CASK CASK
 Lab Sample ID K20814110 K20814111 K20814112

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chlorobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.2]
Chloromethane	SW8260B	ug/L		ND[0.2]	0.91	ND[0.2]		ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.1]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.4]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.07]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.3]
Tetrachloroethene	SW8260B	ug/L		ND[0.2]	2.1	ND[0.1]		ND[0.1]
Toluene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Trichloroethene	SW8260B	ug/L		ND[0.2]	62	ND[0.2]		ND[0.2]
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.3]		ND[0.2]
Vinyl chloride	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.2]
cis-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]	11	ND[0.2]		ND[0.2]
cis-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
m,p-Xylene (Sum of isomers)	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Butylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
n-Propylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
o-Xylene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
sec-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L		ND[0.2]	56	ND[0.2]		ND[0.2]

October 2000 Groundwater Samples

Well ID MW-5 MW-21 MW-21
 API Number AP4015 AP3983 AP3983
 Date Collected 20001011 20001011 20001011
 Matrix WG WG WG
 Sample ID 00-PRDA-513-WA 00-PRDA-514-WA 00-PRDA-514-WA-DUP
 Laboratory CASK CASK CASK
 Lab Sample ID K20814113 K20814114 K20814115

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,1,2-Tetrachloroethane	SW8260B	ug/L	0.4	=		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L	3200	=	3500		3500	
1,1,2-Trichloroethane	SW8260B	ug/L	13	=	34		36	
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
1,1-Dichloroethene	SW8260B	ug/L	5.7	=	18		18	
1,1-Dichloropropene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[1]		ND[1]		ND[1]
1,2-Dibromoethane	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
1,2-Dichloroethane	SW8260B	ug/L	0.3	=	1		0.98	
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3-Dichloropropane	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
2-Butanone	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
2-Chlorotoluene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
2-Hexanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Acetone	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Benzene	SW8260B	ug/L	0.53	=	6.1		6	
Bromobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Bromochloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Bromodichloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Bromoform	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Bromomethane	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Carbon disulfide	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]

October 2000 Groundwater Samples

Well ID	MW-5	MW-21	MW-21
API Number	AP4015	AP3983	AP3983
Date Collected	20001011	20001011	20001011
Matrix	WG	WG	WG
Sample ID	00-PRDA-513-WA	00-PRDA-514-WA	00-PRDA-514-WA-DUP
Laboratory	CASK	CASK	CASK
Lab Sample ID	K20814113	K20814114	K20814115

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L	0.3	ND[0.2]		ND[0.2]		ND[0.2]
Chlorobenzene	SW8260B	ug/L	0.2		0.3		0.3	
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L			3.6		3.5	
Chloromethane	SW8260B	ug/L	2.8	ND[0.2]		ND[0.2]		ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.07]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Tetrachloroethene	SW8260B	ug/L	32		68		68	
Toluene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Trichloroethene	SW8260B	ug/L	2200		0.3		0.3	
Trichlorofluoromethane	SW8260B	ug/L			3000		3100	
Vinyl chloride	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
cis-1,2-Dichloroethene	SW8260B	ug/L	0.97		2.8		2.8	
cis-1,3-Dichloropropene	SW8260B	ug/L	500		1300		1400	
m,p-Xylene (Sum of Isomers)	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
n-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Propylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
o-Xylene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
sec-Butylbenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L	91		200		220	
				ND[0.09]		ND[0.09]		ND[0.09]

October 2000 Groundwater Samples

Well ID MW-19
 API Number AP3981
 Date Collected 20001012
 Matrix WG
 Sample ID 00-PRDA-516-WA
 Laboratory CASK
 Lab Sample ID K20814117

Equipment Blank
 Equipment Blank
 20001012 W
 00-PRDA-516-WR
 CASK
 K20814116

MW-23
 AP3985
 20001012 WG
 00-PRDA-517-WA
 CASK
 K20814118

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chlorobenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Chloroform	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.2]
Chloromethane	SW8260B	ug/L		ND[0.2]	4.9	ND[0.2]	0.59	ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.2]
Dibromomethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.09]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.1]
Dichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.2]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]	0.1	ND[0.4]		ND[0.1]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]		ND[0.07]		ND[0.4]
Naphthalene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.07]
Styrene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.3]
Tetrachloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.1]
Toluene	SW8260B	ug/L		ND[0.1]		ND[0.1]	15	ND[0.1]
Trichloroethene	SW8260B	ug/L	1.3		1.7		680	ND[0.1]
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]	0.5	ND[0.2]		ND[0.2]
Vinyl chloride	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.2]
cis-1,2-Dichloroethene	SW8260B	ug/L	1.4			ND[0.2]	1.7	ND[0.2]
cis-1,3-Dichloropropene	SW8260B	ug/L				ND[0.2]	280	ND[0.2]
m,p-Xylene (Sum of Isomers)	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
n-Butylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
n-Propylbenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
o-Xylene	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
sec-Butylbenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]	0.2	ND[0.2]		ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L		ND[0.2]		ND[0.2]	29	ND[0.2]
	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]

October 2000 Groundwater Samples

Well ID MW-24 MW-22 MW-6
 API Number AP3986 AP3984 AP4016
 Date Collected 20001012 20001012 20001013
 Matrix WG WG WG
 Sample ID 00-PRDA-518-WA 00-PRDA-519-WA 00-PRDA-520-WA
 Laboratory CASK CASK CASK
 Lab Sample ID K20814119 K20814120 K20814121

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
1,1,1,2-Tetrachloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,1-Trichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,1,2,2-Tetrachloroethane	SW8260B	ug/L	230				7.9	
1,1,2-Trichloroethane	SW8260B	ug/L	5.1				0.2	
1,1-Dichloroethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
1,1-Dichloroethene	SW8260B	ug/L						ND[0.2]
1,1-Dichloropropene	SW8260B	ug/L						ND[0.2]
1,2,3-Trichlorobenzene	SW8260B	ug/L		ND[0.4]		ND[0.4]		ND[0.4]
1,2,3-Trichloropropane	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trichlorobenzene	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
1,2,4-Trimethylbenzene	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2-Dibromo-3-chloropropane	SW8260B	ug/L		ND[1]		ND[1]		ND[1]
1,2-Dibromoethane	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
1,2-Dichlorobenzene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
1,2-Dichloroethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,2-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,3,5-Trimethylbenzene	SW8260B	ug/L			0.4			ND[0.2]
1,3-Dichlorobenzene	SW8260B	ug/L			3.8			ND[0.2]
1,3-Dichloropropane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
1,4-Dichlorobenzene	SW8260B	ug/L		ND[0.08]		ND[0.08]		ND[0.08]
2,2-Dichloropropane	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
2-Butanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
2-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
2-Hexanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
4-Chlorotoluene	SW8260B	ug/L		ND[4]		ND[4]		ND[4]
4-Isopropyltoluene	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.09]
4-Methyl-2-pentanone	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.2]
Acetone	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Benzene	SW8260B	ug/L		ND[3]		ND[3]		ND[3]
Bromobenzene	SW8260B	ug/L	0.4				2	ND[0.2]
Bromochloromethane	SW8260B	ug/L		ND[0.1]		ND[0.1]		ND[0.1]
Bromodichloromethane	SW8260B	ug/L		ND[0.2]		ND[0.2]		ND[0.1]
Bromoform	SW8260B	ug/L		ND[0.09]		ND[0.09]		ND[0.2]
Bromomethane	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.09]
Carbon disulfide	SW8260B	ug/L		ND[0.3]		ND[0.3]		ND[0.3]
				ND[0.2]		ND[0.2]		ND[0.2]

October 2000 Groundwater Samples

Well ID	MW-24	MW-22	MW-5
API Number	AP3986	AP3984	AP4016
Date Collected	20001012	20001012	20001013
Matrix	WG	WG	WG
Sample ID	00-PRDA-518-WA	00-PRDA-519-WA	00-PRDA-520-WA
Laboratory	CASK	CASK	CASK
Lab Sample ID	K20814119	K20814120	K20814121

Analyte	Method	Units	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier	Analysis Value	Data Qualifier
Carbon tetrachloride	SW8260B	ug/L		ND[0.2]				ND[0.2]
Chlorobenzene	SW8260B	ug/L		ND[0.1]				ND[0.1]
Chloroethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Chloroform	SW8260B	ug/L						ND[0.1]
Chloromethane	SW8260B	ug/L	1.4	ND[0.2]	3.5	ND[0.2]		ND[0.2]
Dibromochloromethane	SW8260B	ug/L		ND[0.09]				ND[0.09]
Dibromomethane	SW8260B	ug/L		ND[0.1]				ND[0.1]
Dichlorodifluoromethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Dichloromethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Ethylbenzene	SW8260B	ug/L		ND[0.1]				ND[0.1]
Hexachlorobutadiene	SW8260B	ug/L		ND[0.4]				ND[0.4]
Isopropylbenzene	SW8260B	ug/L		ND[0.07]				ND[0.07]
Naphthalene	SW8260B	ug/L		ND[0.3]				ND[0.3]
Styrene	SW8260B	ug/L		ND[0.1]				ND[0.1]
Tetrachloroethene	SW8260B	ug/L	13		60			ND[0.2]
Toluene	SW8260B	ug/L		ND[0.1]			0.3	
Trichloroethene	SW8260B	ug/L	530		2300		13	
Trichlorofluoromethane	SW8260B	ug/L		ND[0.2]				ND[0.2]
Vinyl chloride	SW8260B	ug/L	1.6					ND[0.3]
cis-1,2-Dichloroethene	SW8260B	ug/L	280				1.1	
cis-1,3-Dichloropropene	SW8260B	ug/L		ND[0.09]				ND[0.09]
m,p-Xylene (Sum of Isomers)	SW8260B	ug/L		ND[0.2]				ND[0.2]
n-Butylbenzene	SW8260B	ug/L		ND[0.3]				ND[0.3]
n-Propylbenzene	SW8260B	ug/L		ND[0.1]				ND[0.1]
o-Xylene	SW8260B	ug/L		ND[0.08]				ND[0.08]
sec-Butylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
tert-Butylbenzene	SW8260B	ug/L		ND[0.2]				ND[0.2]
trans-1,2-Dichloroethene	SW8260B	ug/L		ND[0.2]				ND[0.2]
trans-1,3-Dichloropropene	SW8260B	ug/L	43		20			ND[0.2]
				ND[0.09]				ND[0.09]