REVISED FINAL

PHASE I REMEDIAL INVESTIGATION MAY 2004 FOLLOW-ON GROUNDWATER SAMPLING

AT THE

RAMSDELL QUARRY LANDFILL AT THE RAVENNA ARMY AMMUNITION PLANT RAVENNA, OHIO

Prepared for

US Army Corps of Engineers®

U.S. Army Corps of Engineers – Louisville District
Contract No. F44650-D-99-0007
DELIVERY ORDER CY11

MARCH 2005

SAIC®

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

contributed to the preparation of this document and should not be considered an eligible contractor for its review.

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ACRONYMS

AOC	area of concern
COPC	constituent of potential concern
EPA	U. S. Environmental Protection Agency
JMC	Joint Munitions Command
MCL	maximum contaminant level
PCB	polychlorinated biphenyl
PRG	preliminary remediation goal
RI	remedial investigation
RQL	Ramsdell Quarry Landfill
RVAAP	Ravenna Army Ammunition Plant
SRC	site-related contaminant
SVOC	semivolatile organic compound
TAL	target analyte list
VOC	volatile organic compound

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1.0 INTRODUCTION

This report documents the results of the second round (wet season) of groundwater sampling at the Ramsdell Quarry Landfill (RQL) at the U. S. Army Joint Munitions Command (JMC) at the Ravenna Army Ammunition Plant, (RVAAP), Ravenna, Ohio (Figures 1-1 and 1-2). The second round of groundwater sampling was conducted in May 2004, and represents follow-on sampling of the Groundwater Investigation initiated during the Phase I Remedial Investigation (RI). Both the Phase I RI and follow-on sampling were conducted under the U. S. Department of Defense Installation Restoration Program by Science Applications International Corporation and its subcontractors, under contract number F44650-D-99-0007, Delivery Order CY11, with the U. S. Army Corps of Engineers, Louisville District. This investigation was conducted in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 following work plans reviewed and commented on by the Ohio Environmental Protection Agency.

The reader is referred to the Phase I RI (USACE 2004) for additional details regarding the field program, environmental setting, nature and extent of contamination, and conceptual site model.

1.1 PURPOSE AND SCOPE

During the Phase I RI, six new monitoring wells were installed both downgradient (north-northwest) and upgradient (south-southeast) of the area of concern (AOC). The downgradient wells were installed to bound the extent of contamination observed in groundwater adjacent to the quarry and to further evaluate potentiometric gradient reversals, observed previously adjacent to the quarry. Two groundwater wells (RQLmw-013 and -014) were installed in a configuration along the north side of Ramsdell Road to provide data on general hydrogeologic characteristics and groundwater flow patterns. One monitoring well (RQLmw-012) was installed east of Ramsdell Quarry to provide data on general hydrogeologic characteristics and groundwater flow patterns, and to provide closure for the monitoring network in the sidegradient direction. One monitoring well (RQLmw-015) was installed to the west of RQL to fill a data gap in this portion of the AOC. Two upgradient wells were installed to identify if any potential migration of contaminants from Load Line 1 is occurring, which might account for contaminants observed in an upgradient well (RQLmw-006). One upgradient monitoring well (RQLmw-016) was installed southwest of the quarry to fill a data gap in this portion of the AOC and to monitor for potential northward contaminant transport from Load Line 1. The other upgradient monitoring well (RQLmw-017) was installed due south of the AOC, between RQL and Load Line 1; this location was selected to determine whether contaminants observed in the upgradient well at RQL (RQLmw-006) are sourced from Load Line 1. Multiple sampling rounds of newly installed wells, and water level measurements of both newly installed and existing wells under both base flow/dry season conditions and high flow/wet season conditions, were planned to determine if transport of contaminants is occurring under certain hydrologic conditions.

High flow/wet season conditions are represented by the samples collected in May of 2004, and the results are documented in this report.

Figure 1-1. General Location and Orientation of RVAAP

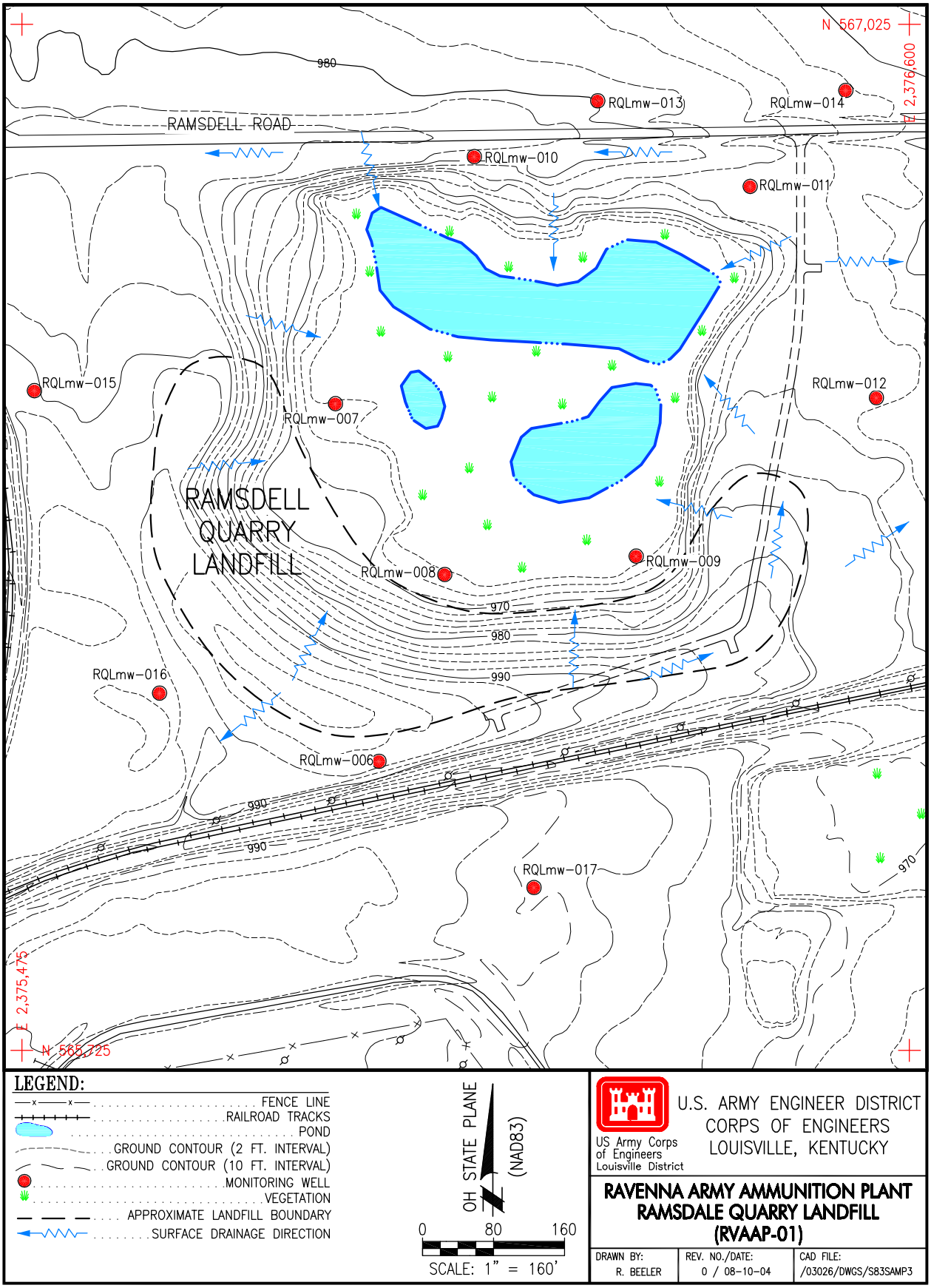

Figure 1-2. Ramsdell Quarry Site Map and Groundwater Monitoring Well Locations

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2.0 SITE HISTORY AND PREVIOUS INVESTIGATIONS

2.1 SITE HISTORY

RVAAP is located in northeastern Ohio in Portage and Trumbull counties and lies about 16 km (10 miles) east of Ravenna, Ohio (Figure 1-1). Operations at the facility began in September 1941 and included the storage, handling, and packing of military ammunition and explosives. The facility encompasses 8,668 ha (21,419 acres) and is jointly operated by the JMC of the U. S. Army and the National Guard Bureau. The JMC controls environmental AOCs and active mission areas. A detailed history of process operations and waste disposal processes for each AOC at RVAAP is presented in the *Preliminary Assessment for the Ravenna Army Ammunition Plant, Ravenna, Ohio* (USACE 1996).

Ramsdell Quarry is located in the northeastern portion of RVAAP and encompasses about 14 acres (Figure 1-2). The quarry was excavated about 9 to 12 m (30 to 40 ft) below existing grade into the Sharon Member of the Pottsville Formation. The original unconsolidated glacial material overlying the sandstone was only a few meters (<10 ft) thick and appears to have been entirely removed. The excavated material, consisting of sandstone and quartz pebble conglomerate, was used for road and construction ballast. Quarry operations were discontinued in about 1941.

The western and southern portions of the abandoned quarry were subsequently used for landfill operations (RQL) between 1941 and 1989 (Figure 1-2). No information is available regarding landfill disposal activities between 1941 and 1976. From 1976 until the landfill was closed in 1989, only non-hazardous solid waste was deposited in RQL. In 1978, a portion of the abandoned quarry was permitted as a sanitary landfill by the state of Ohio. The permit required a 30-m (100-ft) buffer be maintained between the landfill and the pond; the extent of the pond prior to this time is not known. Closure of the permitted sanitary landfill was completed in May 1990 under state of Ohio solid waste regulations (Ohio Administrative Code 3745-27-10). A requirement of closure was installation and semiannual monitoring of five monitoring wells.

In addition, from 1946 to the 1950s, the bottom of the quarry was used to burn waste explosives from Load Line 1. Approximately 18,000 225-kg (500-lb) incendiary or napalm bombs were reported to have been burned in the abandoned quarry. Liquid residues from annealing operations were also dumped in the quarry. No additional historical information currently is available on how the quarry was used, other than for landfill operations, from the 1950s until 1976, when operational records show that non-hazardous solid wastes were placed in RQL.

Based upon available information and past uses of the abandoned quarry, wastes may include domestic, commercial, and industrial solid and liquid wastes, including explosives (e.g., trinitrotoluene, hexahydro-1,3,5-trinitro-1,3,5-triazine, and Composition B), napalm, gasoline, acid dip liquor, annealing residue (e.g., sulfuric acid, shell casings, sodium orthosilicate, chromic acid, and alkali), aluminum chloride, and inert material. Interviews with former RVAAP personnel have indicated that much of the landfilled wastes and debris at the abandoned quarry were removed in the 1980s.

A much smaller quarry (also abandoned) was located directly southeast of RQL (Figure 1-2). Although no standing water was observed in the smaller quarry during earlier investigations, it was water filled in late August 2003 as a result of above average rainfall during the summer of 2003. No documentation of waste disposal or treatment exists for this quarry.

2.2 PREVIOUS SITE INVESTIGATIONS

Previous investigations at Ramsdell Quarry include monitoring related to post-closure of RQL, a Groundwater Investigation to evaluate the suitability of the post-closure groundwater monitoring network for RQL and to investigate general groundwater/surface water interactions in the quarry (USACE 1999, 2000), and the Phase I RI completed in Fall 2003 (USACE 2004). The Groundwater Investigation was designed to: (1) evaluate whether the closed landfill is in compliance with Ohio solid waste post-closure requirements; (2) to close data gaps in the RQL post-closure monitoring program; and (3) to address potential impacts upon groundwater related to historical operations at Ramsdell Quarry prior to use of the site for landfill operations.

The initial phase, conducted in July 1998, involved: (1) the installation and sampling of six monitoring wells, (2) sampling of the existing RQL post-closure monitoring well system, (3) sampling of sediment and surface water within the quarry, and (4) construction of a staff gauge within the main quarry pond. Results of the initial phase of the investigation were presented in the *Initial Phase Report, Groundwater Investigation Ramsdell Quarry Landfill, Ravenna Army Ammunition plant, Ravenna, Ohio* (USACE 1999).

The follow-on phase of the investigation, which extended until July 15, 1999, included: (1) quarterly, dry season, and wet season (storm event) sampling of the new monitoring well network and quarry pond surface water; (2) collection of long-term water levels from new monitoring well network and quarry pond; (3) monthly manual water level measurements from all wells and the pond staff gauge; and (4) collection of precipitation data. Results of the follow-on phase of the investigation were presented in the *Final Phase Report, Groundwater Investigation Ramsdell Quarry Landfill, Ravenna Army Ammunition plant, Ravenna, Ohio* (USACE 2000).

Groundwater samples from the Groundwater Investigation contained low, but consistently detectable, concentrations of nine explosive compounds and associated degradation products and nitroglycerin. Multiple trace metals were present above facility-wide background criteria, as well as Ohio drinking water standards in both unfiltered and filtered samples. The most prevalent of these were aluminum, arsenic, cobalt, manganese, mercury, nickel, and zinc. Sporadic detections of bis(2-ethylhexyl)phthalate and volatile organic compounds (VOCs) were noted. Toluene and methylene chloride were the most persistent VOCs detected. No VOC results exceeded Ohio primary maximum contaminant levels (MCLs). The upgradient well (RQLmw-006) and two wells (RQLmw-007 and -008), located at the toe of the landfill, typically had the highest percentages of detected contaminants. The furthest downgradient well (RQLmw-011) also had a comparatively high frequency of metals above background criteria.

Potentiometric data collected during the period of the Groundwater Investigation showed that horizontal potentiometric gradients are consistently to the northeast across the site during dry periods of the year. During these periods, the quarry pond is a static representation of the water table and may even function as a sink through evapotranspiration processes. During the wet season of the year, a sufficient reservoir of water exists in the quarry pond to act as a recharge point to groundwater. As a result, potentiometric surface elevations in upgradient well RQLmw-006 and those at the toe of the landfill are essentially equal. Rainfall events during the wet period of the year adds additional volume to the quarry pond, which results in sufficient hydraulic head to produce slight, localized flow gradient reversals between the pond and well RQLmw-006 for short periods of time. Wells RQLmw-010 and -011 remain consistently downgradient of RQL throughout the year.

The distribution of contaminants in wells at RQL observed during the Groundwater Investigation are consistent with the observed hydraulic characteristics. Considering that the horizontal potentiometric gradient during the wet season is flat and exhibits short-term reversals, RQL is the likely source of

observed contaminants in well RQLmw-006. For a majority of the year, groundwater flow is consistently to the north-northeast providing the mechanism for contaminant migration to wells located at the toe of RQL and to RQLmw-011.

The groundwater characterization effort during the Phase I RI included: (1) the abandonment of wells MW-1, -2, -3, -4, and -5; (2) the installation of six additional monitoring wells both downgradient (north-northwest) and upgradient (south-southeast) of the AOC; and (3) sampling rounds of existing wells and water level measurements of existing and newly installed wells.

Explosives, propellants, semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs) were not detected in groundwater samples from the RI monitoring wells. Phase I RI samples contained low concentrations of 18 metals, 12 of which were considered to be site-related contaminants (SRCs) (maximum concentrations greater than site background criteria for filtered groundwater). Of these, arsenic, lead, and manganese were determined to be constituents of potential concern (COPCs) based on exposure concentrations above filtered site background criteria and/or Region 9 tap water criteria. One VOC, carbon disulfide, was detected in all six wells, but the maximum concentration was well below the Region 9 tap water criteria (Table 2-1). The most easterly well (RQLmw-012), sidegradient to RQL, and one of the furthest downgradient wells (RQLmw-013) had the highest percentage of detected inorganic SRCs, with 9 and 10 SRCs, respectively (Table 2-2). The adjacent downgradient well (RQLmw-014) and the two wells on the western side of the AOC (RQLmw-015 and -016) had the fewest number of inorganic SRCs detected, with five SRCs in RQLmw-014 and six SRCs each in RQLmw-015 and -016. RQLmw-017, located south of the AOC, had eight inorganic SRCs detected during the Phase I baseline sampling event.

Potentiometric data collected for the Phase I RI (April 2004) baseline showed that horizontal potentiometric gradients are consistently to the northeast across the site, which was consistent with results of the Groundwater Investigation in 1998 and 1999 (Figure 2-1).

2.3 PHASE I REMEDIAL INVESTIGATION CONSTITUENTS OF POTENTIAL CONCERN

Phase I baseline COPCs in groundwater include lead, iron, and manganese, which exceeded U. S. Environmental Protection Agency (EPA) Region 9 tap water preliminary remediation goals (PRGs) (Table 2-1). Explosives, and trace levels of other organic compounds detected during the Groundwater Investigation in wells RQmw-006 through -011, were not detected in the Phase I RI groundwater wells RQmw-012 through -017.

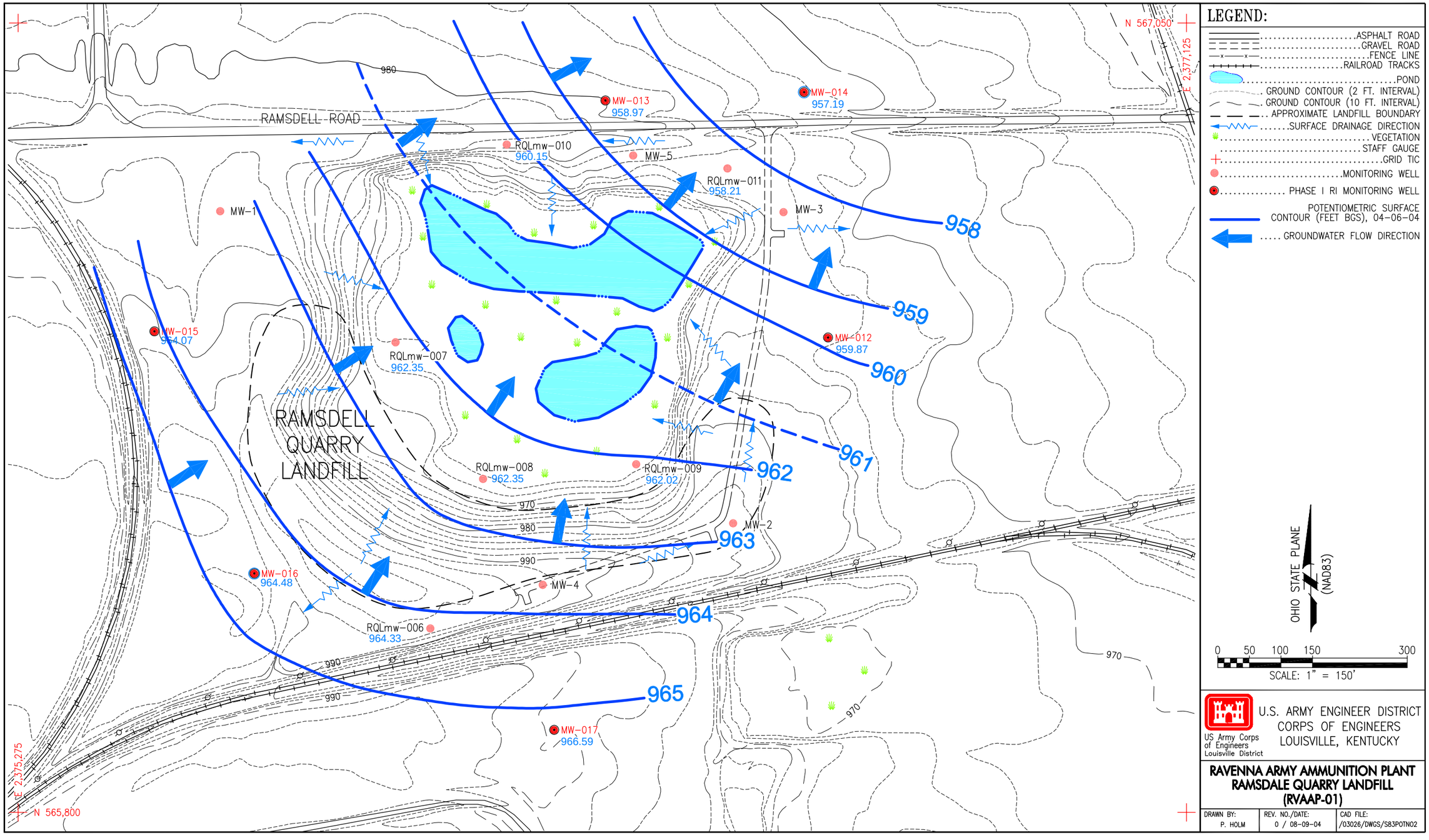

Figure 2-1. Ramsdell Quarry Potentiometric Surface, April 2004

Table 2-1. Summary of COPC Screening for Ramsdell Quarry Groundwater, Phase I RI (December 2003)

Analyte (mg/L)	Results >Detection Limit	Average Result	Minimum Detect	Maximum Detect	95% UCL of Mean	Exposure Concentration	MCL	Max. Det.>MCL?	Site Background Criteria	Region 9 Tap Water Criteria	Max Detect > Tap Water Criteria	COPC?	Site Related?
Metals													
Aluminum	3/ 6	1.27E+00	7.88E-02	6.13E+00	6.98E+06	6.13E+00	2.00E-01	Yes [a]		3.65E+01	No	No	Yes
Antimony	1/ 6	2.34E-04	5.80E-04	5.80E-04	3.74E-04	3.74E-04	6.00E-03	No		1.46E-02	No	No	Yes
Arsenic	4/ 6	2.13E-03	9.50E-04	6.80E-03	7.64E-02	6.80E-03	5.00E-02	No		4.48E-05	Yes	Yes	Yes
Barium	6/ 6	2.17E-02	4.20E-03	4.54E-02	3.32E-02	3.32E-02	2.00E+00	No	2.56E-01	2.55E+00	No	No	No
Beryllium	4/ 6	1.49E-04	7.60E-05	5.70E-04	2.31E-02	5.70E-04	4.00E-03	No		7.30E-02	No	No	Yes
Cadmium	2/ 6	2.37E-04	4.80E-04	7.00E-04	4.69E-04	4.69E-04	5.00E-03	No		1.82E-02	No	No	Yes
Calcium	6/ 6	1.11E+02	1.98E+01	4.52E+02	1.45E+03	4.52E+02		N/A	5.31E+01		None	No	No
Cobalt	6/ 6	2.65E-02	6.70E-03	7.00E-02	1.58E-01	7.00E-02		N/A		7.30E-01	No	No	Yes
Copper	3/ 6	1.55E-03	2.00E-03	3.40E-03	2.55E-03	2.55E-03	1.30E+00	No		1.46E+00	No	No	Yes
Iron	4/ 6	2.56E+00	8.20E-03	7.25E+00	5.07E+00	5.07E+00	3.00E-01	Yes [a]	1.43E+00	1.09E+01	No	No	No
Lead	2/ 6	3.92E-04	5.10E-04	1.30E-03	7.80E-04	7.80E-04	1.50E-02	No			None	Yes	Yes
Magnesium	6/ 6	2.26E+01	8.97E+00	5.73E+01	5.89E+01	5.73E+01		N/A	1.50E+01		None	No	No
Manganese	6/ 6	2.32E+00	2.66E-01	6.17E+00	4.42E+01	6.17E+00	5.00E-02	Yes [a]	1.34E+00	8.76E-01	Yes	Yes	Yes
Nickel	6/ 6	8.98E-02	1.64E-02	3.06E-01	1.04E+00	3.06E-01	1.00E-01	Yes	8.34E-02	7.30E-01	No	No	Yes
Potassium	6/ 6	3.27E+00	1.77E+00	5.02E+00	4.88E+00	4.88E+00		N/A	5.77E+00		None	No	No
Sodium	6/ 6	7.34E+00	1.50E+00	2.32E+01	4.03E+01	2.32E+01		N/A	5.14E+01		None	No	No
Vanadium	1/ 6	7.67E-04	1.60E-03	1.60E-03	1.10E-03	1.10E-03		N/A		2.55E-01	No	No	Yes
Zinc	6/ 6	1.03E-01	8.20E-03	3.12E-01	2.10E+01	3.12E-01	5.00E+00	No [a]	5.23E-02	1.09E+01	No	No	Yes
Organics-Volatile													
Carbon Disulfide	6/ 6	2.67E-03	6.60E-04	7.90E-03	1.82E-02	7.90E-03		N/A		1.04E+00	No	No	Yes

[a] - Secondary maximum contaminant level (MCL).
COPC = Constituent of potential concern.
N/A = Not available.
RI = Remedial investigation.
UCL = Upper confidence limit.

Table 2-2. Detected Analytes in Ramsdell Quarry Phase I RI Wells Baseline Event (December 2003)

Media		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Location		Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well
Station		RQLmw-012	RQLmw-012	RQLmw-013	RQLmw-014	RQLmw-015	RQLmw-016	RQLmw-017
Sample ID		RQ0139	RQ0160	RQ0140	RQ0141	RQ0142	RQ0143	RQ0144
Customer ID		RQLmw-012-0139-GW	RQLmw-012-0160-GW	RQLmw-013-0140-GW	RQLmw-014-0141-GW	RQLmw-015-0142-GW	RQLmw-016-0143-GW	RQLmw-017-0144-GW
Date		12/02/2003	12/02/2003	12/02/2003	12/02/2003	12/04/2003	12/04/2003	12/01/2003
Field Type		Grab	Field Duplicate	Grab	Grab	Grab	Grab	Grab
Analyte (mg/L)	Units							
Dissolved Metals								
Aluminum	mg/L	1.38 = *	1.4 = *	6.13 = *	0.0105 U	0.0298 U	0.0413 U	0.0788 = *
Antimony	mg/L	0.00033 U	0.00033 U	0.00033 U	0.00033 U	0.00058 J *	0.00033 U	0.00033 U
Arsenic	mg/L	0.00055 U	0.00055 U	0.002 = *	0.00055 U	0.0068 = *	0.0025 = *	0.00095 J *
Barium	mg/L	0.0238 J	0.024 J	0.0454 J	0.0138 J	0.0042 =	0.0261 =	0.0167 J
Beryllium	mg/L	0.000076 J *	0.000083 = *	0.00057 = *	0.000021 U	0.000021 U	0.000076 J *	0.00015 = *
Cadmium	mg/L	0.0007 = *	0.00075 = *	0.00048 = *	0.00012 U	0.00012 U	0.00012 U	0.00012 U
Calcium	mg/L	50.6 =	51.1 =	19.8 =	40.2 =	20.4 =	452 = *	81.3 = *
Cobalt	mg/L	0.0084 = *	0.0085 = *	0.0452 = *	0.0067 = *	0.0141 = *	0.0143 = *	0.07 = *
Copper	mg/L	0.0034 J *	0.0037 J *	0.002 J *	0.001 UJ	0.0021 U	0.00024 U	0.0022 J *
Iron	mg/L	0.0082 J	0.0189 J	4.6 = *	3.47 = *	0.0134 U	7.25 = *	0.0065 U
Lead	mg/L	0.0013 = *	0.0014 = *	0.00051 J *	0.00018 U	0.00043 U	0.00029 U	0.00018 U
Magnesium	mg/L	13.6 =	13.8 =	11.9 =	17.3 = *	8.97 =	57.3 = *	26.3 = *
Manganese	mg/L	0.266 =	0.27 =	0.584 =	1.59 = *	0.682 =	6.17 = *	4.63 = *
Nickel	mg/L	0.0202 =	0.0205 =	0.0906 = *	0.0164 =	0.0437 =	0.062 =	0.306 = *
Potassium	mg/L	5.02 =	5.08 =	2.87 =	4.04 =	1.77 =	2.67 =	3.24 =
Sodium	mg/L	3.63 =	3.68 =	23.2 =	3.79 =	1.5 =	6.82 =	5.12 =
Vanadium	mg/L	0.0012 U	0.0012 U	0.0012 U	0.0016 J *	0.0012 U	0.0012 U	0.0012 U
Zinc	mg/L	0.0415 =	0.0433 =	0.235 = *	0.0111 =	0.0082 J	0.0097 J	0.312 = *
Volatile Organics								
Carbon Disulfide	mg/L	0.00066 J	0.0017 =	0.0025 =	0.00069 J	0.0033 =	0.0079 =	0.00095 J
Chloromethane	mg/L	0.001 U	0.0038 =	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

ID = Identifier.
RI = Remedial investigation.
RQL = Ramsdell Quarry Landfill.
Qualifiers:
* = Value above facility-wide background.
= = Analysis present and concentration accurate.
J = Estimated values less than reporting limits.
U = Non-detect.

3.0 MAY 2004 WET SEASON SAMPLING

Prior to purging and sampling for the May 2004 sampling event of the Phase I RI groundwater monitoring wells, water level measurements were taken at each of the six newly installed groundwater wells (RQLmw-012 through -017), as well as the existing groundwater wells (RQLmw-006 through -011). Wells RQLmw-012 through -017 were also sampled for chemical analysis.

3.1 WATER LEVEL MEASUREMENTS

Table 3-1 presents the results of water level measurements under high flow conditions. Figure 3-1 shows the groundwater potentiometric surface based on the second event water level measurements.

Table 3-1. Groundwater Elevations from Second Event Sampling (May 2004)

Well ID	Elev. Top of PVC	Depth to Water (ft)	Groundwater Elevation
RQLmw-006	995.39	30.10	965.29
RQLmw-007	965.91	3.33	962.58
RQLmw-008	966.08	3.38	962.7
RQLmw-009	964.58	2.12	962.46
RQLmw-010	982.14	21.77	960.37
RQLmw-011	976.57	18.15	958.42
RQLmw-012	977.65	17.54	960.11
RQLmw-013	980.71	21.55	959.16
RQLmw-014	973.49	16.17	957.32
RQLmw-015	991.26	26.36	964.90
RQLmw-016	996.60	30.16	966.44
RQLmw-017	991.23	23.29	967.94

ID = Identifier.
PVC = Polyvinyl chloride.

Potentiometric data collected immediately before the second (May 2004) sampling event of the investigation continue to show that horizontal potentiometric gradients are consistently to the northeast across the site. The gradient reversals observed during the Groundwater Investigation water level measurements were not noted during May 2004 at the time the water level measurements were taken. The water table was elevated by 1 to 2 ft compared to measurements taken in early April, 2004, and a gradient of nearly 11 ft existed between the most upgradient well (RQLmw-017) and the most downgradient well (RQLmw-014). The difference between these two wells during the previous event was only 8 ft.

3.2 MONITORING WELL SAMPLING

Following AOC-wide groundwater level measurements, groundwater samples were collected from each of the six Phase I RI monitoring wells. Per the SAP Addendum for the Phase I RI, wet season/storm event sampling was to occur within 24 hrs of a rainfall event of 1 in. or more. Due to the lack of such substantial single rain events during the wet season period, relief from this specific requirement was provided by Ohio EPA and USACE so long as wet season, high flow conditions were represented.

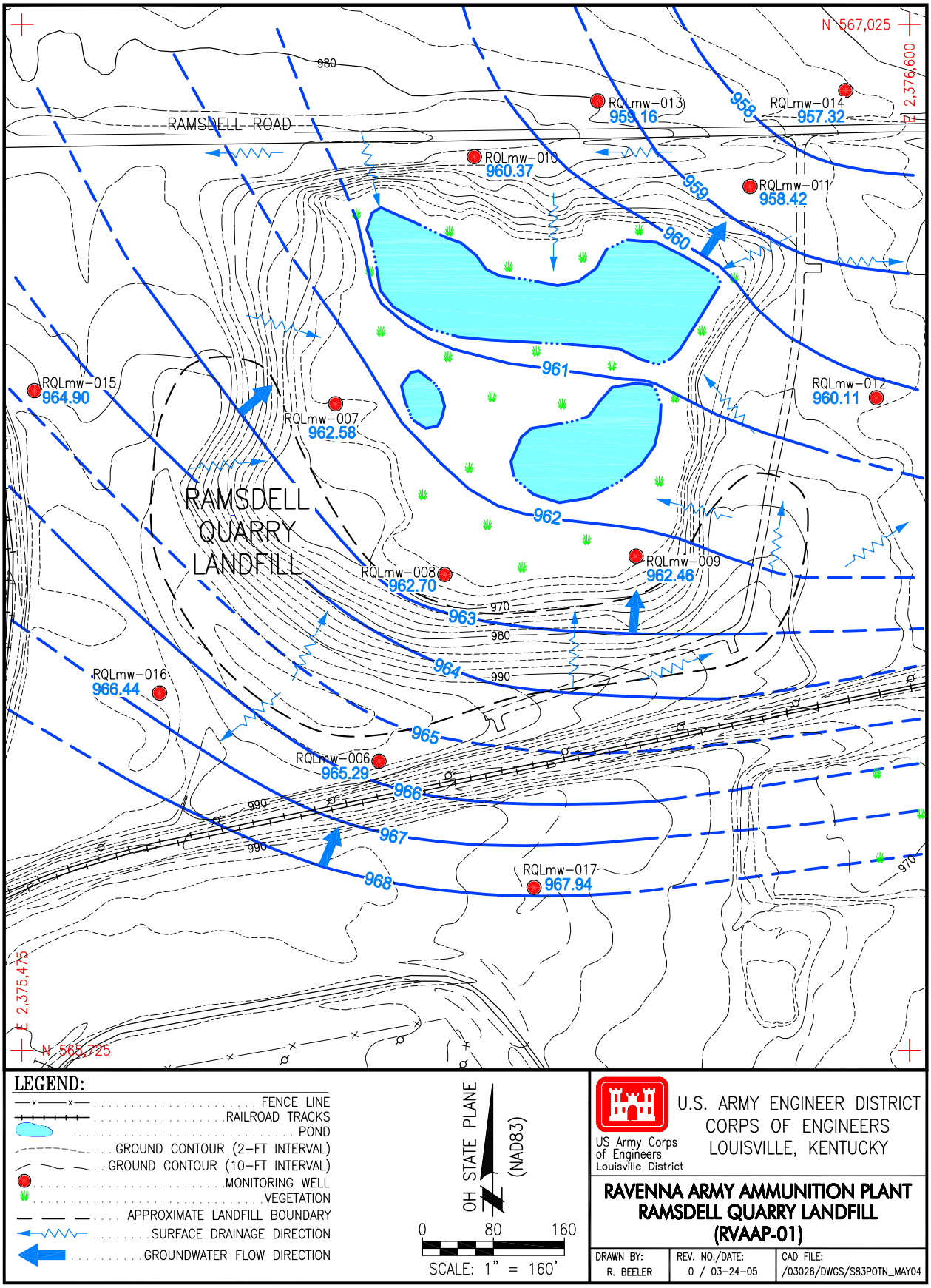

Figure 3-1. Groundwater Potentiometric Map, Second Event (May 2004)

Sampling started on May 19, 2004, following a total of 0.28 in. of rainfall that fell over the preceding 4 days (May 15 through 18, 2004). Additional rainfall occurred on May 20, 2004 (0.3 in.), and May 21, 2004 (0.68 in.), during the course of the sampling event. Thus, the May 2004 samples are deemed to be representative of high flow conditions.

The procedure for sampling is detailed in Section 4.3.4.2 of the Facility-wide Sampling and Analysis Plan (USACE 2001). All groundwater samples from RQL were analyzes for target analyte list (TAL) metals (filtered only), explosives, propellants, cyanide, VOCs, SVOCs, and pesticides/PCBs. Despite being developed in accordance with work plan specifications and using micropurge sampling methods, where possible, to obtain the lowest turbidity wells practicable, turbidity levels remained above 5 nephelometric turbidity units in most wells. Accordingly, only filtered metals samples were obtained. Groundwater samples analyzed for TAL metals were filtered during sample collection using an in-line, disposable barrel filter with 0.45-um pores. For those wells with slow recharge rates where micro-purge techniques were not applicable (RQLmw-015, -016, and -017), samples for TAL metals were filtered using a negative pressure, hand-operated vacuum pump and collection flask with a 0.45-um pore size filter. Analytical program overview for the wet season event sampling was consistent with that for the baseline sampling during the Phase I RI. Groundwater sampling logs are presented in Appendix A; and complete analytical results for all sampling events are included in Appendix B.

3.3 RESULTS

Table 3-2 presents the summary statistics for the second round sampling event. A total of 11 inorganic and 2 organic SRCs were detected in the wet season samples. Arsenic, lead, and manganese exceeded the EPA Region 9 tap water criteria, and are considered to be COPCs. However, it should be noted that while arsenic and manganese exceeded the PRG (in the case of lead, no Region 9 tap water criteria exist), the maximum concentration of both metals was below other promulgated criteria. The federal and Ohio MCL for arsenic is 0.05 mg/L, and the maximum detected concentration in May 2004 was 0.0012 mg/L. Likewise, for lead, the federal treatment technique standard is 0.015 mg/L, and the maximum detected concentration in May 2004 was 0.0036 mg/L. Two phthalates, bis(2-ethylhexyl)phthalate and di-n-butyl phthalate, were detected in the May 2004 analysis. Di-n-butyl phthalate was below the Region 9 tap water criteria, and is not considered a COPC. All six wells had detections of phthalates during the second sampling event, and none were detected during the Phase I RI baseline event. Conversely, carbon disulfide was detected in all wells during the Phase I RI baseline event, but was not detected in May 2004.

Vanadium, which was detected in one well during the Phase I RI baseline event, was not detected in the May 2004 samples. The southernmost well, RQLmw-017, had the greatest number of inorganic SRCs detected, with 10 of 11 SRCs having their maximum concentrations at this well (Table 3-3). Downgradient well RQLmw-013 also contained 10 SRCs, with the maximum concentration of arsenic at this location (arsenic was not detected in RQLmw-017). The eastern boundary well RQLmw-012 contained nine SRCs, and downgradient wells RQLmw-014, -015, and -016 each contained six SRCs.

The explosives noted in groundwater during the 1998/1999 Groundwater Investigation were not detected in any Phase I RI groundwater well in the 2003 and 2004 baseline and wet season sample events. It can be concluded that the bounds of explosive contamination in groundwater have been adequately defined, and explosive contaminant migration is not occurring off the AOC. The continual low concentrations of metals detected are fairly indicative of landfill environments, and concentrations continue to fall below applicable Ohio MCLs.

Table 3-2. Summary of COPC Screening for Ramsdell Quarry Groundwater - Wet Season (May 2004)

Analyte (mg/L)	Results >Detection Limit	Average Result	Minimum Detect	Maximum Detect	95% UCL of Mean	Exposure Concentration	MCL	Max. Det.>MCL?	Site Background Criteria	Region 9 Tap Water Criteria	Max Detect > Tap Water Criteria	COPC?	Site Related?
Metals													
Aluminum	3/ 6	2.77E+00	6.56E-01	1.14E+01	1.11E+10	1.14E+01	2.00E-01	Yes [a]		3.65E+01	No	No	Yes
Arsenic	2/ 6	4.73E-04	9.40E-04	1.20E-03	8.60E-04	8.60E-04	5.00E-02	No		4.48E-05	Yes	Yes	Yes
Barium	6/ 6	1.92E-02	2.00E-03	3.16E-02	2.92E-02	2.92E-02	2.00E+00	No	2.56E-01	2.55E+00	No	No	No
Beryllium	4/ 6	5.35E-04	3.10E-05	2.70E-03	7.22E+00	2.70E-03	4.00E-03	No		7.30E-02	No	No	Yes
Cadmium	3/ 6	3.85E-04	2.10E-04	1.50E-03	4.62E-03	1.50E-03	5.00E-03	No		1.82E-02	No	No	Yes
Calcium	6/ 6	4.34E+01	1.85E+01	1.26E+02	1.32E+02	1.26E+02		N/A	5.31E+01		None	No	No
Chromium	4/ 6	1.97E-03	1.80E-03	4.80E-03	9.02E-03	4.80E-03	1.00E-01	No			None	Yes	Yes
Cobalt	6/ 6	1.81E-02	8.80E-04	5.33E-02	1.24E+00	5.33E-02		N/A		7.30E-01	No	No	Yes
Iron	4/ 6	3.01E+00	3.06E+00	6.74E+00	5.20E+00	5.20E+00	3.00E-01	Yes [a]	1.43E+00	1.09E+01	No	No	No
Lead	6/ 6	9.60E-04	2.00E-04	3.60E-03	1.06E-02	3.60E-03	1.50E-02	No			None	Yes	Yes
Magnesium	6/ 6	1.21E+01	8.73E+00	1.96E+01	1.69E+01	1.69E+01		N/A	1.50E+01		None	No	No
Manganese	6/ 6	2.19E+00	2.14E-01	7.08E+00	7.36E+01	7.08E+00	5.00E-02	Yes	1.34E+00	8.76E-01	Yes	Yes	Yes
Nickel	6/ 6	4.56E-02	1.00E-02	1.36E-01	4.71E-01	1.36E-01	1.00E-01	Yes [a]	8.34E-02	7.30E-01	No	No	Yes
Potassium	6/ 6	2.92E+00	1.29E+00	3.93E+00	3.74E+00	3.74E+00		N/A	5.77E+00		None	No	No
Selenium	1/ 6	2.49E-04	4.70E-04	4.70E-04	3.38E-04	3.38E-04	5.00E-02	No		1.82E-01	No	No	Yes
Sodium	6/ 6	6.44E+00	9.15E-01	1.92E+01	7.12E+01	1.92E+01		N/A	5.14E+01		None	No	No
Zinc	6/ 6	1.96E-01	2.27E-02	7.81E-01	6.42E+00	7.81E-01	5.00E+00	No [a]	5.23E-02	1.09E+01	No	No	Yes
Organics-Semivolatile													
Bis(2-ethylhexyl)phthalate	6/ 6	9.48E-03	3.10E-03	2.20E-02	4.20E-02	2.20E-02	6.00E-03	Yes		4.80E-03	Yes	Yes	Yes
Di-n-butyl phthalate	5/ 6	2.45E-03	1.50E-03	2.00E-03	3.89E-03	2.00E-03		N/A		3.65E+00	No	No	Yes

[a] - Secondary maximum contaminant level (MCL).
COPC = Constituent of potential concern.
N/A = Not available.
UCL = Upper confidence limit.

Table 3-3. Detected Analytes in Ramsdell Quarry Phase I RI Wells, Wet Season Sampling Event (May 2004)

Media		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Location		Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well	Ramsdell Monitoring Well
Station		RQLmw-012	RQLmw-013	RQLmw-013	RQLmw-014	RQLmw-015	RQLmw-016	RQLmw-017
Sample ID		RQ0151	RQ0152	RQ0159	RQ0153	RQ0154	RQ0155	RQ0156
Customer ID		RQLmw-012-0151-GW	RQLmw-013-0152-GW	RQLmw-013-0159-GW	RQLmw-014-0153-GW	RQLmw-015-0154-GW	RQLmw-016-0155-GW	RQLmw-017-0156-GW
Date		05/20/2004	05/19/2004	05/19/2004	05/19/2004	05/21/2004	05/21/2004	05/19/2004
Field Type		Grab	Grab	Field Duplicate	Grab	Grab	Grab	Grab
Analyte (mg/L)	Units							
Dissolved Metals								
Aluminum	mg/L	0.656 = *	4.53 = *	4.56 = *	0.0151 U	0.0245 U	0.0248 U	11.4 = *
Arsenic	mg/L	0.00035 U	0.0012 J *	0.0014 = *	0.00035 U	0.00035 U	0.00094 J *	0.00035 U
Barium	mg/L	0.0301 =	0.0316 =	0.0321 =	0.0276 =	0.002 =	0.0112 =	0.0125 =
Beryllium	mg/L	0.000061 J *	0.00039 = *	0.00037 = *	0.000025 U	0.000031 J *	0.000025 U	0.0027 = *
Cadmium	mg/L	0.00021 J *	0.00033 J *	0.00036 J *	0.00018 U	0.00018 U	0.00018 U	0.0015 = *
Calcium	mg/L	28.6 =	22.5 =	22.4 =	21 =	18.5 =	126 = *	43.5 =
Chromium	mg/L	0.0019 J *	0.0022 J *	0.0011 U	0.0018 J *	0.0011 U	0.0011 U	0.0048 = *
Cobalt	mg/L	0.0064 = *	0.0338 = *	0.0348 = *	0.0094 = *	0.00088 = *	0.0048 = *	0.0533 = *
Iron	mg/L	0.0186 U	3.33 = *	3.37 = *	6.74 = *	0.0232 U	4.88 = *	3.06 = *
Lead	mg/L	0.00095 = *	0.00033 J *	0.00041 J *	0.0002 J *	0.00043 J *	0.00025 J *	0.0036 = *
Magnesium	mg/L	8.73 =	11.9 =	11.7 =	10.3 =	8.77 =	19.6 = *	13.3 =
Manganese	mg/L	0.214 =	0.461 =	0.469 =	2.08 = *	0.854 =	2.44 = *	7.08 = *
Nickel	mg/L	0.0223 =	0.0724 =	0.0735 =	0.0193 =	0.0133 =	0.01 =	0.136 = *
Potassium	mg/L	3.93 =	2.46 =	2.44 =	2.67 =	1.29 =	3.89 =	3.27 =
Selenium	mg/L	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U	0.00047 J *
Sodium	mg/L	2.39 =	19.2 =	19.4 =	4.01 =	0.915 =	7.14 =	4.99 =
Zinc	mg/L	0.0399 J	0.179 J *	0.187 J *	0.0227 J	0.115 J *	0.0402 J	0.781 J *
Semivolatile Organics								
Bis(2-ethylhexyl)phthalate	mg/L	0.022 =	0.004 J	0.0033 J	0.0033 J	0.0031 J	0.015 =	0.0095 J
Di-n-butyl phthalate	mg/L	0.002 J	0.0015 J	0.0015 J	0.002 J	0.012 U	0.0015 J	0.0017 J

ID = Identifier.
RI = Remedial investigation.
RQL = Ramsdell Quarry Landfill

Qualifiers:

* = Value above facility-wide background criterion.
= = Analyte present and concentration accurate.
J = Estimated value less than reporting limits.
U = Non-detect.

It was noted that several wells exhibited low pH readings during the May 2004 sampling event (e.g., RQLmw-012 had a pH value of 3.95 and RQLmw-017 had pH values of 3.13 to 3.68). The reason for this is not known. In the December 2003 (baseline) sampling, RQLmw-012 and -013 both had low pH readings (3.8 to 3.9 range), while the pH for RQLmw-017 was slightly acidic to normal (5 to 6.13 range).

4.0 REFERENCES

USACE (U. S. Army Corps of Engineers) 1996. *Preliminary Assessment for the Ravenna Army Ammunition Plant, Ravenna, Ohio,* DACA62-94-D-0029, D.O. 0009, Final, February.

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USACE (U. S. Army Corps of Engineers) 2000. *Final Phase Report on the Groundwater Investigation of the Ramsdell Quarry Landfill, Ravenna Army Ammunition Plant, Ravenna, Ohio,* DACA27-97-D-0025, D.O. 003, August.

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APPENDIX A

GROUNDWATER SAMPLING LOGS

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TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 05/19/04 SRA 3/16/05 Su M Tu W (Th) F Sa PAGE 1 OF 1

AOC-wide water levels

Narrative (include time and location):

AOC-wide water level measurements taken prior to purging/sampling for May 2004 RIQL Follow-On Sampling event SRA 3/16/05

(Well ID)	(depth [ft] below top of casing)	(time [a.m.])
MW-10	21.77	0929
11	18.15	0933
12	17.54	0937
09	2.12	0942
08	3.38	0946
06	30.10	0952
16	30.16	0957
07	3.53	1004
15	26.36	1009
13	21.55	1013
14	16.17	1016
17	23.29	1059

SRA 3/16/05

Daily Weather Conditions: A.M. _____

P.M. _____

Recorded By _____ QA Checked By Sally Hosler 3/16/05

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 5/20/04 Su M Tu W (Th) F Sa PAGE 1 OF 4

Kelly Milner
Martha Clough

RQLMW-012 SRR 8/12/04

Narrative (include time and location):

1045 - Arrive & set up for sampling. H_2O @ 17.6' bgs.
1100 - Start pump - take initial readings w/ Horiba
1120 - Sample RQ0151 collected for full suite analysis
~~1125~~ KM 5/24/04 - 1200 Record final readings w/ Horiba

Daily Weather Conditions: A.M. 80°F, sunny w/ clouds
P.M.

Recorded By Kelly Milner QA Checked By

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Page 3 of 4

Date: 5/20/04 Time: 1050

Well Number and Location: RDL-mw 012

Purge Crew: Kelly Milner
Martha Clough

Date and Time: Begin: 5/20/04 1045 Completed: 5/20/04 1130

Purge Method(S): Bladder pump

Total Quantity of Water Removed: 1.5 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba U-22 15073	5/20/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba U-22 15073	5/20/04

Recorded By: Kelly Milner (Signature and Date) 5/20/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

PAGE 4 OF 4

WELL NUMBER AND LOCATION: RQL-mw01Z

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/20/04	1100	0	14.4	0.191	5.04	276	0	—	initial readings
↓	1105	0.5	11.0	0.284	3.95	237	0.5	—	
	1110	0.5	10.8	0.281	4.10	168	1.0	—	
	1115	0.5	10.6	0.281	4.13	124	1.5	—	params stable
	1120	—	—	—	—	—	—	—	collect sample
↓	1200	0	11.6	0.295	4.53	53	1.5	—	final readings

RECORDED BY: _____ (Signature and Date) 5/20/04

QA CHECK BY: _____ (Signature and Date)

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TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 5/19/04 Su M Tu (W) Th F Sa PAGE 1 OF 4

Kelly Milner
Martha Clough

Narrative (include time and location): SRE 8/12/04

1140 - Arrive & set up for sampling @ RQLmw-013
1145 - start pump - take readings w/ Horiba
1215 - Sample RQ0152 collected for full suite analysis (RQ0159 - duplicate also collected)
1340 - stop pump - take final readings w/ Horiba

Daily Weather Conditions: A.M. 75° Cloudy
P.M.

Recorded By Kelly Milner QA Checked By

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

Page 3 of 4

Date: 5/19/04 Time: _____

Well Number and Location: RQL-mw04B

Purge Crew: Kelly Milner
Martha Clough

Date and Time: Begin: 5/19/04, 1140 Completed: 5/19/04, 1345

Purge Method(S): bladder pump (used for equip. rins.)

Total Quantity of Water Removed: 3.0 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba U-22 15073	5/19/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba U-22 15073	5/19/04

Recorded By: Kelly Milner (Signature and Date) 05/19/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

WELL NUMBER AND LOCATION: RQL-mw03

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/19/04	1145	0.25	11.0	0.402	4.21	999	0.25	—	initial readings
	1155	0.75	10.8	0401	4.14	360	1.0	—	
	1205	1.0	10.9	0.405	4.33	338	2.0	—	
	1212	1.0	11.0	0.386	4.55	168	3.0	—	params stable
	1215	—	—	—	—	—	—	—	collect sample
↓	1340	—	~~12.1~~	0.382	5.06	128	3.0	—	final readings

RECORDED BY: Kelly J. Mu (Signature and Date) 5/19/04

QA CHECK BY: _____ (Signature and Date)

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 5/19/04 Su M Tu (W) Th F Sa PAGE 1 OF 4

Martha Clough
Kelly Milner

Narrative (include time and location): SRR 8/12/04

1300- Arrive & set up for sampling @ RQLmw-014
1400- Sample RQ0153 (& MS/MSD) collected for full suite analysis.
1530- Finish sampling

Daily Weather Conditions: A.M. _____
(P.M) 75°F partly cloudy

Recorded By Kelly Milner 5/19/04 QA Checked By _____

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

Page 4 of 4

Date: 5/19/04 Time: 1300

Well Number and Location: RQL-mw 014

Purge Crew: Kelly Milner
Martha Clough

Date and Time: Begin: 5/19/04 1300 Completed: 5/19/04 1530

Purge Method(S): Bladder pump

Total Quantity of Water Removed: 2.2 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba U-22 1573	5/19/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba U-22 1573	5/19/04

Recorded By: Kelly A Milner (Signature and Date) 5/19/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

WELL NUMBER AND LOCATION: RQL-MW04

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/19/04	1316	0	13.5	0.237	5.97	>999	0	—	initial readings
	1321	0.75	11.8	0.142	5.75	874	0.75	—	
	1326	0.75	11.7	0.140	5.72	436	1.5	—	
	1331	0.75	11.3	0.146	5.70	168	2.25	—	
	1336	—	11.3	0.157	5.73	104	2.25	—	
									final readings not recorded, air line disconnected

RECORDED BY: _____ (Signature and Date) 5/19/04

QA CHECK BY: _____ (Signature and Date)

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 5/21/04 Su M Tu W Th (F) Sa PAGE 1 OF 4

Kelly Milner
Martha Clough

Narrative (include time and location):

RQLMW-015 SRR 8/12/04

0845 - Arrive & set up for sampling H₂O@ 26.22'

0850 - Start pump - record readings w/ Horiba

0910 - Sample RQ0154 collected for full suite analysis
Kim 5/21/04

1005 - Stop pump - final readings recorded w/ Horiba

Daily Weather Conditions: (A.M.) 80°F partly sunny

P.M.

Recorded By Kelly Milner QA Checked By

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

Date: 5/21/04 Time: 0845

Well Number and Location: RQL-mw05

Purge Crew:

Date and Time: Begin: 5/21/04 0845 Completed: 5/21/04 1015

Purge Method(S): bladder pump

Total Quantity of Water Removed: 10 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba U-22 15073	5/21/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba U-22 15073	5/21/04

Recorded By: [signature] (Signature and Date) 5/21/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

WELL NUMBER AND LOCATION: RQL-mw Φ15

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (μMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/21/04	0850	Φ	18.7	Φ.231	6.51	78.5	Φ	—	initial readings
	0855	Φ.5	14.3	Φ.195	5.63	159	Φ.5	—	
	0900	Φ.25	13.5	Φ.188	5.54	115	Φ.75	—	
	0905	Φ.25	12.9	Φ.185	5.53	63	1.Φ	—	params stable
	0910	—						—	sample collected
	1005	—	14.1	Φ.197	6.12	85	1.Φ	—	final readings

RECORDED BY: Kelly J Pm (Signature and Date) 5/21/04

QA CHECK BY: _____ (Signature and Date)

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 05/20/04 Su M Tu W (Th) F Sa PAGE 1 OF 4

Kelly Milner

Martha Clough

Narrative (include time and location):

SRR 8/12/04

0900 – Arrive & set up for sampling @ RQL-MW-016

0910 – Start ~~bailing~~ pumping – record initial Horiba readings

1315 – Return for more buckets

1415 – Well dry – Will return in morning to sample

5/21/04 1035 – Sample RQ0151 collected for full Suite analysis

1050 – Final Horiba readings

Daily Weather Conditions: A.M. 75°F, dry

P.M.

Recorded By [signature] QA Checked By

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

Date: 05/20/04 Time: 0900

Well Number and Location: RQL-mw016

Purge Crew: Kelly Milner
Martha Clough

Date and Time: Begin: 05/20/04 0900 Completed: 05/21/04 1100

Purge Method(S): Bailer (plastic disposable)

Total Quantity of Water Removed: 23 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba 1573	5/20/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba 1573	5/20/04

Recorded By: _____ (Signature and Date) 5/20/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO:** CY11

WELL NUMBER AND LOCATION: RQL-mw06

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/20/04	0910	0	~~KM~~ 11.7	1.55	6.23	142	0 ~~11.7~~	—	initial readings
↓	1200	—						—	begin bailing dry
↓	1315	16	~~KM~~	—	—	—	16	—	go back for more buckets
↓	1415	7	~~KM~~ 3	—	—	—	23	—	well is dry
5/21/04	1035	—						—	return in morning H_2O=29.91' collect samp
↓	1050	—	14.5	0.941	6.26	233	23	—	final readings

05/21/04

RECORDED BY: _____ (Signature and Date) 05/21/04

QA CHECK BY: _____ (Signature and Date)

TASK TEAM ACTIVITY LOG SHEET

PROJECT NAME: Ramsdell Quarry Phase I RI **DELIVERY ORDER NO: CY11**

Date (mm/dd/yy): 5/19/04 Su M Tu W Th F Sa PAGE 1 OF 4

Kelly Milner
Martha Clough

Narrative (include time and location):

1100- Arrive & set up for sampling @ ROL-mw017
This well has very little water & very slow recharge - will bail dry then sample
1104- Initial readings recorded
1625- Final readings recorded

Daily Weather Conditions: (A.M.) 75° Partly cloudy
P.M.

Recorded By KM QA Checked By

WELL PURGE RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI DELIVERY ORDER NO: CY11

Date: 5/19/04 Time: 1100

Well Number and Location: RQL-mw 04

Purge Crew: Kelly Milner
Martha Clough

Date and Time: Begin: 05/19/04, 1100 Completed: 05/19/04, 1700

Purge Method(S): disp. bailer

Total Quantity of Water Removed: 2-4 gals

FIELD MEASUREMENT	SERIAL NUMBER	DATE OF LAST CALIBRATION
Temperature	Horiba U-22 1504 73	5/19/04
Specific Conductivity	↓	↓
Water Level	Heron Dipper T	—
pH	Horiba U-22 1504 73	5/19/04

Recorded By: _____ (Signature and Date) 05/19/04

QA Check By: _____ (Signature and Date)

WELL PURGE RECORD

PROJECT NAME: Ramsdel Quarry Phase III

DELIVERY ORDER NO.: 0411

WELL NUMBER AND LOCATION: ROL-mw01 7

DATE	TIME	GALLONS REMOVED	TEMP(C)	SPECIFIC CONDUCTIVITY (µMHOS/CM)	pH (Standard Units)	TURBIDITY	TOTAL GALLONS REMOVED	WELL VOLUMES REMOVED	COMMENTS
5/19/04	1104	0	11.4	0.745	3.13	72	0	—	initial readings
5/19/04	1625	2.0	11.9	0.668	3.68	585	2.0	—	final readings

RECORDED BY: _____ 05/19/04
(Signature and Date)

QA CHECK BY: _____
(Signature and Date)

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APPENDIX B

ANALYTICAL LABORATORY DATA TABLES

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Baseline Sampling Event

December 2003

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Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0139 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00032	mg/L	U	U		0.00032	1
	3-Nitrotoluene	0.00032	mg/L	U	UJ	P01	0.00032	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00032	mg/L	U	U		0.00032	1
	HMX	0.00032	mg/L	U	UJ	P01	0.00032	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D05,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00032	mg/L	U	UJ	P01	0.00032	1
	Tetryl	0.00032	mg/L	U	U		0.00032	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	1.38	mg/L		=		0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.00055	mg/L	U	U		0.00055	1
	Barium	0.0238	mg/L		J	F10	0.00018	1
	Beryllium	0.000076	mg/L	B	J		0.000021	1
	Cadmium	0.0007	mg/L		=		0.00012	1
	Calcium	50.6	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0084	mg/L		=		0.000025	1
	Copper	0.0034	mg/L		J	F10	0.000067	1
	Iron	0.0082	mg/L	B	J		0.0065	1
	Lead	0.0013	mg/L		=		0.00018	1
	Magnesium	13.6	mg/L		=		0.0038	1
	Manganese	0.266	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.0202	mg/L		=		0.0003	1
	Potassium	5.02	mg/L		=		0.0384	1
	Selenium	0.0019	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	3.63	mg/L		=		0.0343	1
	Thallium	0.00063	mg/L		U	F01,F07	0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.0415	mg/L		=		0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00007	mg/L	U	UJ	P02	0.00007	1
	4,4'-DDE	0.00007	mg/L	U	UJ	P02	0.00007	1
	4,4'-DDT	0.00007	mg/L	U	U		0.00007	1
	Aldrin	0.00007	mg/L	U	UJ	P02	0.00007	1
	alpha-BHC	0.00007	mg/L	U	UJ	P02	0.00007	1
	alpha-Chlordane	0.00007	mg/L	U	UJ	P02	0.00007	1
	beta-BHC	0.00007	mg/L	U	U		0.00007	1
	delta-BHC	0.00007	mg/L	U	U		0.00007	1
	Dieldrin	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan I	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan II	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan sulfate	0.00007	mg/L	U	U		0.00007	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0139 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.00007	mg/L	U	U		0.00007	1
	Endrin aldehyde	0.00007	mg/L	U	U		0.00007	1
	Endrin ketone	0.00007	mg/L	U	UJ	P02	0.00007	1
	gamma-Chlordane	0.00007	mg/L	U	UJ	P02	0.00007	1
	Heptachlor	0.00007	mg/L	U	U		0.00007	1
	Heptachlor epoxide	0.00007	mg/L	U	UJ	P02	0.00007	1
	Lindane	0.00007	mg/L	U	U		0.00007	1
	Methoxychlor	0.00007	mg/L	U	U		0.00007	1
SW846 8082	PCB-1016	0.00065	mg/L	U	U		0.00065	1
	PCB-1221	0.00065	mg/L	U	U		0.00065	1
	PCB-1232	0.00065	mg/L	U	U		0.00065	1
	PCB-1242	0.00065	mg/L	U	U		0.00065	1
	PCB-1248	0.00065	mg/L	U	U		0.00065	1
	PCB-1254	0.00065	mg/L	U	U		0.00065	1
	PCB-1260	0.00065	mg/L	U	U		0.00065	1
SW846 8081A	Toxaphene	0.0013	mg/L	U	U		0.0013	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,2-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,3-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,4-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	2,4,5-Trichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4,6-Trichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4-Dichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4-Dimethylphenol	0.013	mg/L	U	U		0.013	1
	2,4-Dinitrophenol	0.026	mg/L	U	U		0.026	1
	2,4-Dinitrotoluene	0.013	mg/L	U	U		0.013	1
	2,6-Dinitrotoluene	0.013	mg/L	U	U		0.013	1
	2-Chloronaphthalene	0.013	mg/L	U	U		0.013	1
	2-Chlorophenol	0.013	mg/L	U	U		0.013	1
	2-Methyl-4,6-dinitrophenol	0.026	mg/L	U	U		0.026	1
	2-Methylnaphthalene	0.013	mg/L	U	U		0.013	1
	2-Methylphenol	0.013	mg/L	U	U		0.013	1
	2-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	2-Nitrophenol	0.013	mg/L	U	U		0.013	1
	3,3'-Dichlorobenzidine	0.026	mg/L	U	U		0.026	1
	3-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Bromophenyl phenyl ether	0.013	mg/L	U	U		0.013	1
	4-Chloro-3-methylphenol	0.013	mg/L	U	U		0.013	1
	4-Chlorobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Chlorophenyl phenyl ether	0.013	mg/L	U	U		0.013	1
	4-Methylphenol	0.013	mg/L	U	U		0.013	1
	4-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Nitrophenol	0.026	mg/L	U	U		0.026	1
	Acenaphthene	0.013	mg/L	U	U		0.013	1
	Acenaphthylene	0.013	mg/L	U	U		0.013	1
	Anthracene	0.013	mg/L	U	U		0.013	1
	Benz(a)anthracene	0.013	mg/L	U	U		0.013	1
	Benzenemethanol	0.013	mg/L	U	U		0.013	1
	Benzo(a)pyrene	0.013	mg/L	U	U		0.013	1
	Benzo(b)fluoranthene	0.013	mg/L	U	U		0.013	1
	Benzo(ghi)perylene	0.013	mg/L	U	U		0.013	1
	Benzo(k)fluoranthene	0.013	mg/L	U	U		0.013	1
	Benzoic acid	0.026	mg/L	U	U		0.026	1
	Bis(2-chloroethoxy)methane	0.013	mg/L	U	U		0.013	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0139 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	0.013	mg/L	U	U		0.013	1
	Bis(2-chloroisopropyl) ether	0.013	mg/L	U	U		0.013	1
	Bis(2-ethylhexyl)phthalate	0.013	mg/L	JB	U	F01,F06	0.013	1
	Butyl benzyl phthalate	0.013	mg/L	U	U		0.013	1
	Carbazole	0.013	mg/L	U	U		0.013	1
	Chrysene	0.013	mg/L	U	U		0.013	1
	Di-n-butyl phthalate	0.013	mg/L	JB	U	F01,F06	0.013	1
	Di-n-octylphthalate	0.013	mg/L	U	U		0.013	1
	Dibenz(a,h)anthracene	0.013	mg/L	U	U		0.013	1
	Dibenzofuran	0.013	mg/L	U	U		0.013	1
	Diethyl phthalate	0.013	mg/L	U	U		0.013	1
	Dimethyl phthalate	0.013	mg/L	U	U		0.013	1
	Fluoranthene	0.013	mg/L	U	U		0.013	1
	Fluorene	0.013	mg/L	U	U		0.013	1
	Hexachlorobenzene	0.013	mg/L	U	U		0.013	1
	Hexachlorobutadiene	0.013	mg/L	U	U		0.013	1
	Hexachlorocyclopentadiene	0.013	mg/L	U	U		0.013	1
	Hexachloroethane	0.013	mg/L	U	U		0.013	1
	Indeno(1,2,3-cd)pyrene	0.013	mg/L	U	U		0.013	1
	Isophorone	0.013	mg/L	U	U		0.013	1
	N-Nitroso-di-n-propylamine	0.013	mg/L	U	U		0.013	1
	N-Nitrosodiphenylamine	0.013	mg/L	U	U		0.013	1
	Naphthalene	0.013	mg/L	U	U		0.013	1
	Nitrobenzene	0.013	mg/L	U	U		0.013	1
	Pentachlorophenol	0.026	mg/L	U	U		0.026	1
	Phenanthrene	0.013	mg/L	U	U		0.013	1
	Phenol	0.013	mg/L	U	U		0.013	1
	Pyrene	0.013	mg/L	U	U		0.013	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	U	U		0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.00066	mg/L	J	J		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1

Station: RQLmw-012
Sample ID: RQ0139 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0011	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Station: RQLmw-012
Sample ID: RQ0160 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	3-Nitrotoluene	0.00031	mg/L	U	UJ	P01	0.00031	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	HMX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D05,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Tetryl	0.00031	mg/L	U	U		0.00031	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	1.4	mg/L		=		0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.00055	mg/L	U	U		0.00055	1
	Barium	0.024	mg/L		J	F10	0.00018	1
	Beryllium	0.000083	mg/L		=		0.000021	1
	Cadmium	0.00075	mg/L		=		0.00012	1
	Calcium	51.1	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0085	mg/L		=		0.000025	1
	Copper	0.0037	mg/L		J	F10	0.000067	1
	Iron	0.0189	mg/L	B	J		0.0065	1
	Lead	0.0014	mg/L		=		0.00018	1
	Magnesium	13.8	mg/L		=		0.0038	1
	Manganese	0.27	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.0205	mg/L		=		0.0003	1
	Potassium	5.08	mg/L		=		0.0384	1
	Selenium	0.0022	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	3.68	mg/L		=		0.0343	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0160 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Filtered Inorganics	**GPL**							
SW846 6020	Thallium	0.00058	mg/L	B	U	F01,F06	0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.0433	mg/L		=		0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00007	mg/L	U	UJ	P02	0.00007	1
	4,4'-DDE	0.00007	mg/L	U	UJ	P02	0.00007	1
	4,4'-DDT	0.00007	mg/L	U	U		0.00007	1
	Aldrin	0.00007	mg/L	U	UJ	P02	0.00007	1
	alpha-BHC	0.00007	mg/L	U	UJ	P02	0.00007	1
	alpha-Chlordane	0.00007	mg/L	U	UJ	P02	0.00007	1
	beta-BHC	0.00007	mg/L	U	U		0.00007	1
	delta-BHC	0.00007	mg/L	U	U		0.00007	1
	Dieldrin	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan I	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan II	0.00007	mg/L	U	UJ	P02	0.00007	1
	Endosulfan sulfate	0.00007	mg/L	U	U		0.00007	1
	Endrin	0.00007	mg/L	U	U		0.00007	1
	Endrin aldehyde	0.00007	mg/L	U	U		0.00007	1
	Endrin ketone	0.00007	mg/L	U	UJ	P02	0.00007	1
	gamma-Chlordane	0.00007	mg/L	U	UJ	P02	0.00007	1
	Heptachlor	0.00007	mg/L	U	U		0.00007	1
	Heptachlor epoxide	0.00007	mg/L	U	UJ	P02	0.00007	1
	Lindane	0.00007	mg/L	U	U		0.00007	1
	Methoxychlor	0.00007	mg/L	U	U		0.00007	1
SW846 8082	PCB-1016	0.00065	mg/L	U	U		0.00065	1
	PCB-1221	0.00065	mg/L	U	U		0.00065	1
	PCB-1232	0.00065	mg/L	U	U		0.00065	1
	PCB-1242	0.00065	mg/L	U	U		0.00065	1
	PCB-1248	0.00065	mg/L	U	U		0.00065	1
	PCB-1254	0.00065	mg/L	U	U		0.00065	1
	PCB-1260	0.00065	mg/L	U	U		0.00065	1
SW846 8081A	Toxaphene	0.0013	mg/L	U	U		0.0013	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,2-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,3-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	1,4-Dichlorobenzene	0.013	mg/L	U	U		0.013	1
	2,4,5-Trichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4,6-Trichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4-Dichlorophenol	0.013	mg/L	U	U		0.013	1
	2,4-Dimethylphenol	0.013	mg/L	U	U		0.013	1
	2,4-Dinitrophenol	0.026	mg/L	U	U		0.026	1
	2,4-Dinitrotoluene	0.013	mg/L	U	U		0.013	1
	2,6-Dinitrotoluene	0.013	mg/L	U	U		0.013	1
	2-Chloronaphthalene	0.013	mg/L	U	U		0.013	1
	2-Chlorophenol	0.013	mg/L	U	U		0.013	1
	2-Methyl-4,6-dinitrophenol	0.026	mg/L	U	U		0.026	1
	2-Methylnaphthalene	0.013	mg/L	U	U		0.013	1
	2-Methylphenol	0.013	mg/L	U	U		0.013	1
	2-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	2-Nitrophenol	0.013	mg/L	U	U		0.013	1
	3,3'-Dichlorobenzidine	0.026	mg/L	U	U		0.026	1
	3-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Bromophenyl phenyl ether	0.013	mg/L	U	U		0.013	1
	4-Chloro-3-methylphenol	0.013	mg/L	U	U		0.013	1

Station: RQLmw-012
Sample ID: RQ0160 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	4-Chlorobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Chlorophenyl phenyl ether	0.013	mg/L	U	U		0.013	1
	4-Methylphenol	0.013	mg/L	U	U		0.013	1
	4-Nitrobenzenamine	0.013	mg/L	U	U		0.013	1
	4-Nitrophenol	0.026	mg/L	U	U		0.026	1
	Acenaphthene	0.013	mg/L	U	U		0.013	1
	Acenaphthylene	0.013	mg/L	U	U		0.013	1
	Anthracene	0.013	mg/L	U	U		0.013	1
	Benz(a)anthracene	0.013	mg/L	U	U		0.013	1
	Benzenemethanol	0.013	mg/L	U	U		0.013	1
	Benzo(a)pyrene	0.013	mg/L	U	U		0.013	1
	Benzo(b)fluoranthene	0.013	mg/L	U	U		0.013	1
	Benzo(ghi)perylene	0.013	mg/L	U	U		0.013	1
	Benzo(k)fluoranthene	0.013	mg/L	U	U		0.013	1
	Benzoic acid	0.026	mg/L	U	U		0.026	1
	Bis(2-chloroethoxy)methane	0.013	mg/L	U	U		0.013	1
	Bis(2-chloroethyl) ether	0.013	mg/L	U	U		0.013	1
	Bis(2-chloroisopropyl) ether	0.013	mg/L	U	U		0.013	1
	Bis(2-ethylhexyl)phthalate	0.013	mg/L	JB	U	F01,F06	0.013	1
	Butyl benzyl phthalate	0.013	mg/L	U	U		0.013	1
	Carbazole	0.013	mg/L	U	U		0.013	1
	Chrysene	0.013	mg/L	U	U		0.013	1
	Di-n-butyl phthalate	0.013	mg/L	JB	U	F01,F06	0.013	1
	Di-n-octylphthalate	0.013	mg/L	U	U		0.013	1
	Dibenz(a,h)anthracene	0.013	mg/L	U	U		0.013	1
	Dibenzofuran	0.013	mg/L	U	U		0.013	1
	Diethyl phthalate	0.013	mg/L	U	U		0.013	1
	Dimethyl phthalate	0.013	mg/L	U	U		0.013	1
	Fluoranthene	0.013	mg/L	U	U		0.013	1
	Fluorene	0.013	mg/L	U	U		0.013	1
	Hexachlorobenzene	0.013	mg/L	U	U		0.013	1
	Hexachlorobutadiene	0.013	mg/L	U	U		0.013	1
	Hexachlorocyclopentadiene	0.013	mg/L	U	U		0.013	1
	Hexachloroethane	0.013	mg/L	U	U		0.013	1
	Indeno(1,2,3-cd)pyrene	0.013	mg/L	U	U		0.013	1
	Isophorone	0.013	mg/L	U	U		0.013	1
	N-Nitroso-di-n-propylamine	0.013	mg/L	U	U		0.013	1
	N-Nitrosodiphenylamine	0.013	mg/L	U	U		0.013	1
	Naphthalene	0.013	mg/L	U	U		0.013	1
	Nitrobenzene	0.013	mg/L	U	U		0.013	1
	Pentachlorophenol	0.026	mg/L	U	U		0.026	1
	Phenanthrene	0.013	mg/L	U	U		0.013	1
	Phenol	0.013	mg/L	U	U		0.013	1
	Pyrene	0.013	mg/L	U	U		0.013	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0160 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	JB	U	F01,F06	0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.0017	mg/L		=		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.0038	mg/L		=		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1
	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0012	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0140 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00032	mg/L	U	U		0.00032	1
	3-Nitrotoluene	0.00032	mg/L	U	UJ	P01	0.00032	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00032	mg/L	U	U		0.00032	1
	HMX	0.00032	mg/L	U	UJ	P01	0.00032	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D05,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00032	mg/L	U	UJ	P01	0.00032	1
	Tetryl	0.00032	mg/L	U	U		0.00032	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	6.13	mg/L		=		0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.002	mg/L		=		0.00055	1
	Barium	0.0454	mg/L		J	F10	0.00018	1
	Beryllium	0.00057	mg/L		=		0.000021	1
	Cadmium	0.00048	mg/L		=		0.00012	1
	Calcium	19.8	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0452	mg/L		=		0.000025	1
	Copper	0.002	mg/L		J	F10	0.000067	1
	Iron	4.6	mg/L		=		0.0065	1
	Lead	0.00051	mg/L	B	J		0.00018	1
	Magnesium	11.9	mg/L		=		0.0038	1
	Manganese	0.584	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.0906	mg/L		=		0.0003	1
	Potassium	2.87	mg/L		=		0.0384	1
	Selenium	0.0025	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	23.2	mg/L		=		0.0343	1
	Thallium	0.0014	mg/L		U	F07	0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.235	mg/L		=		0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00006	mg/L	U	UJ	P02	0.00006	1
	4,4'-DDE	0.00006	mg/L	U	UJ	P02	0.00006	1
	4,4'-DDT	0.00006	mg/L	U	U		0.00006	1
	Aldrin	0.00006	mg/L	U	UJ	P02	0.00006	1
	alpha-BHC	0.00006	mg/L	U	UJ	P02	0.00006	1
	alpha-Chlordane	0.00006	mg/L	U	UJ	P02	0.00006	1
	beta-BHC	0.00006	mg/L	U	U		0.00006	1
	delta-BHC	0.00006	mg/L	U	U		0.00006	1
	Dieldrin	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan I	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan II	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan sulfate	0.00006	mg/L	U	U		0.00006	1

Station: RQLmw-013
Sample ID: RQ0140 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.00006	mg/L	U	U		0.00006	1
	Endrin aldehyde	0.00006	mg/L	U	U		0.00006	1
	Endrin ketone	0.00006	mg/L	U	UJ	P02	0.00006	1
	gamma-Chlordane	0.00006	mg/L	U	UJ	P02	0.00006	1
	Heptachlor	0.00006	mg/L	U	U		0.00006	1
	Heptachlor epoxide	0.00006	mg/L	U	UJ	P02	0.00006	1
	Lindane	0.00006	mg/L	U	U		0.00006	1
	Methoxychlor	0.00006	mg/L	U	U		0.00006	1
SW846 8082	PCB-1016	0.00062	mg/L	U	U		0.00062	1
	PCB-1221	0.00062	mg/L	U	U		0.00062	1
	PCB-1232	0.00062	mg/L	U	U		0.00062	1
	PCB-1242	0.00062	mg/L	U	U		0.00062	1
	PCB-1248	0.00062	mg/L	U	U		0.00062	1
	PCB-1254	0.00062	mg/L	U	U		0.00062	1
	PCB-1260	0.00062	mg/L	U	U		0.00062	1
SW846 8081A	Toxaphene	0.0012	mg/L	U	U		0.0012	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,2-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,3-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,4-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	2,4,5-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4,6-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dimethylphenol	0.012	mg/L	U	U		0.012	1
	2,4-Dinitrophenol	0.025	mg/L	U	U		0.025	1
	2,4-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2,6-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2-Chloronaphthalene	0.012	mg/L	U	U		0.012	1
	2-Chlorophenol	0.012	mg/L	U	U		0.012	1
	2-Methyl-4,6-dinitrophenol	0.025	mg/L	U	U		0.025	1
	2-Methylnaphthalene	0.012	mg/L	U	U		0.012	1
	2-Methylphenol	0.012	mg/L	U	U		0.012	1
	2-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	2-Nitrophenol	0.012	mg/L	U	U		0.012	1
	3,3'-Dichlorobenzidine	0.025	mg/L	U	U		0.025	1
	3-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Bromophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Chloro-3-methylphenol	0.012	mg/L	U	U		0.012	1
	4-Chlorobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Chlorophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Methylphenol	0.012	mg/L	U	U		0.012	1
	4-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Nitrophenol	0.025	mg/L	U	U		0.025	1
	Acenaphthene	0.012	mg/L	U	U		0.012	1
	Acenaphthylene	0.012	mg/L	U	U		0.012	1
	Anthracene	0.012	mg/L	U	U		0.012	1
	Benz(a)anthracene	0.012	mg/L	U	U		0.012	1
	Benzenemethanol	0.012	mg/L	U	U		0.012	1
	Benzo(a)pyrene	0.012	mg/L	U	U		0.012	1
	Benzo(b)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzo(ghi)perylene	0.012	mg/L	U	U		0.012	1
	Benzo(k)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzoic acid	0.025	mg/L	U	U		0.025	1
	Bis(2-chloroethoxy)methane	0.012	mg/L	U	U		0.012	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0140 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-chloroisopropyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-ethylhexyl)phthalate	0.012	mg/L	JB	U	F01,F06	0.012	1
	Butyl benzyl phthalate	0.012	mg/L	U	U		0.012	1
	Carbazole	0.012	mg/L	U	U		0.012	1
	Chrysene	0.012	mg/L	U	U		0.012	1
	Di-n-butyl phthalate	0.012	mg/L	U	U		0.012	1
	Di-n-octylphthalate	0.012	mg/L	U	U		0.012	1
	Dibenz(a,h)anthracene	0.012	mg/L	U	U		0.012	1
	Dibenzofuran	0.012	mg/L	U	U		0.012	1
	Diethyl phthalate	0.012	mg/L	U	U		0.012	1
	Dimethyl phthalate	0.012	mg/L	U	U		0.012	1
	Fluoranthene	0.012	mg/L	U	U		0.012	1
	Fluorene	0.012	mg/L	U	U		0.012	1
	Hexachlorobenzene	0.012	mg/L	U	U		0.012	1
	Hexachlorobutadiene	0.012	mg/L	U	U		0.012	1
	Hexachlorocyclopentadiene	0.012	mg/L	U	U		0.012	1
	Hexachloroethane	0.012	mg/L	U	U		0.012	1
	Indeno(1,2,3-cd)pyrene	0.012	mg/L	U	U		0.012	1
	Isophorone	0.012	mg/L	U	U		0.012	1
	N-Nitroso-di-n-propylamine	0.012	mg/L	U	U		0.012	1
	N-Nitrosodiphenylamine	0.012	mg/L	U	U		0.012	1
	Naphthalene	0.012	mg/L	U	U		0.012	1
	Nitrobenzene	0.012	mg/L	U	U		0.012	1
	Pentachlorophenol	0.025	mg/L	U	U		0.025	1
	Phenanthrene	0.012	mg/L	U	U		0.012	1
	Phenol	0.012	mg/L	U	U		0.012	1
	Pyrene	0.012	mg/L	U	U		0.012	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	U	U		0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.0025	mg/L		=		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0140 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0012	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-014
Sample ID: RQ0141 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	3-Nitrotoluene	0.00031	mg/L	U	UJ	P01	0.00031	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	HMX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D05,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Tetryl	0.00031	mg/L	U	U		0.00031	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	0.0105	mg/L	U	U		0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.00055	mg/L	U	U		0.00055	1
	Barium	0.0138	mg/L		J	F10	0.00018	1
	Beryllium	0.000021	mg/L	U	U		0.000021	1
	Cadmium	0.00012	mg/L	U	U		0.00012	1
	Calcium	40.2	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0067	mg/L		=		0.000025	1
	Copper	0.001	mg/L		UJ	F01,F07, F10,F12	0.000067	1
	Iron	3.47	mg/L		=		0.0065	1
	Lead	0.00018	mg/L	U	U		0.00018	1
	Magnesium	17.3	mg/L		=		0.0038	1
	Manganese	1.59	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.0164	mg/L		=		0.0003	1
	Potassium	4.04	mg/L		=		0.0384	1
	Selenium	0.0018	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	3.79	mg/L		=		0.0343	1
	Thallium	0.00015	mg/L	U	U		0.00015	1
	Vanadium	0.0016	mg/L	B	J		0.0012	1
	Zinc	0.0111	mg/L		=		0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00008	mg/L	U	UJ	P02	0.00008	1
	4,4'-DDE	0.00008	mg/L	U	UJ	P02	0.00008	1
	4,4'-DDT	0.00008	mg/L	U	U		0.00008	1
	Aldrin	0.00008	mg/L	U	UJ	P02	0.00008	1
	alpha-BHC	0.00008	mg/L	U	UJ	P02	0.00008	1
	alpha-Chlordane	0.00008	mg/L	U	UJ	P02	0.00008	1
	beta-BHC	0.00008	mg/L	U	U		0.00008	1
	delta-BHC	0.00008	mg/L	U	U		0.00008	1
	Dieldrin	0.00008	mg/L	U	UJ	P02	0.00008	1
	Endosulfan I	0.00008	mg/L	U	UJ	P02	0.00008	1
	Endosulfan II	0.00008	mg/L	U	UJ	P02	0.00008	1

Station: RQLmw-014
Sample ID: RQ0141 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endosulfan sulfate	0.00008	mg/L	U	U		0.00008	1
	Endrin	0.00008	mg/L	U	U		0.00008	1
	Endrin aldehyde	0.00008	mg/L	U	U		0.00008	1
	Endrin ketone	0.00008	mg/L	U	UJ	P02	0.00008	1
	gamma-Chlordane	0.00008	mg/L	U	UJ	P02	0.00008	1
	Heptachlor	0.00008	mg/L	U	U		0.00008	1
	Heptachlor epoxide	0.00008	mg/L	U	UJ	P02	0.00008	1
	Lindane	0.00008	mg/L	U	U		0.00008	1
	Methoxychlor	0.00008	mg/L	U	U		0.00008	1
SW846 8082	PCB-1016	0.00077	mg/L	U	U		0.00077	1
	PCB-1221	0.00077	mg/L	U	U		0.00077	1
	PCB-1232	0.00077	mg/L	U	U		0.00077	1
	PCB-1242	0.00077	mg/L	U	U		0.00077	1
	PCB-1248	0.00077	mg/L	U	U		0.00077	1
	PCB-1254	0.00077	mg/L	U	U		0.00077	1
	PCB-1260	0.00077	mg/L	U	U		0.00077	1
SW846 8081A	Toxaphene	0.0015	mg/L	U	U		0.0015	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,2-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,3-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,4-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	2,4,5-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4,6-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dimethylphenol	0.012	mg/L	U	U		0.012	1
	2,4-Dinitrophenol	0.024	mg/L	U	U		0.024	1
	2,4-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2,6-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2-Chloronaphthalene	0.012	mg/L	U	U		0.012	1
	2-Chlorophenol	0.012	mg/L	U	U		0.012	1
	2-Methyl-4,6-dinitrophenol	0.024	mg/L	U	U		0.024	1
	2-Methylnaphthalene	0.012	mg/L	U	U		0.012	1
	2-Methylphenol	0.012	mg/L	U	U		0.012	1
	2-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	2-Nitrophenol	0.012	mg/L	U	U		0.012	1
	3,3'-Dichlorobenzidine	0.024	mg/L	U	U		0.024	1
	3-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Bromophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Chloro-3-methylphenol	0.012	mg/L	U	U		0.012	1
	4-Chlorobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Chlorophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Methylphenol	0.012	mg/L	U	U		0.012	1
	4-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Nitrophenol	0.024	mg/L	U	U		0.024	1
	Acenaphthene	0.012	mg/L	U	U		0.012	1
	Acenaphthylene	0.012	mg/L	U	U		0.012	1
	Anthracene	0.012	mg/L	U	U		0.012	1
	Benz(a)anthracene	0.012	mg/L	U	U		0.012	1
	Benzenemethanol	0.012	mg/L	U	U		0.012	1
	Benzo(a)pyrene	0.012	mg/L	U	U		0.012	1
	Benzo(b)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzo(ghi)perylene	0.012	mg/L	U	U		0.012	1
	Benzo(k)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzoic acid	0.024	mg/L	U	U		0.024	1

Station: RQLmw-014
Sample ID: RQ0141 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethoxy)methane	0.012	mg/L	U	U		0.012	1
	Bis(2-chloroethyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-chloroisopropyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-ethylhexyl)phthalate	0.012	mg/L	JB	U	F01,F06	0.012	1
	Butyl benzyl phthalate	0.012	mg/L	U	U		0.012	1
	Carbazole	0.012	mg/L	U	U		0.012	1
	Chrysene	0.012	mg/L	U	U		0.012	1
	Di-n-butyl phthalate	0.012	mg/L	JB	U	F01,F06	0.012	1
	Di-n-octylphthalate	0.012	mg/L	U	U		0.012	1
	Dibenz(a,h)anthracene	0.012	mg/L	U	U		0.012	1
	Dibenzofuran	0.012	mg/L	U	U		0.012	1
	Diethyl phthalate	0.012	mg/L	U	U		0.012	1
	Dimethyl phthalate	0.012	mg/L	U	U		0.012	1
	Fluoranthene	0.012	mg/L	U	U		0.012	1
	Fluorene	0.012	mg/L	U	U		0.012	1
	Hexachlorobenzene	0.012	mg/L	U	U		0.012	1
	Hexachlorobutadiene	0.012	mg/L	U	U		0.012	1
	Hexachlorocyclopentadiene	0.012	mg/L	U	U		0.012	1
	Hexachloroethane	0.012	mg/L	U	U		0.012	1
	Indeno(1,2,3-cd)pyrene	0.012	mg/L	U	U		0.012	1
	Isophorone	0.012	mg/L	U	U		0.012	1
	N-Nitroso-di-n-propylamine	0.012	mg/L	U	U		0.012	1
	N-Nitrosodiphenylamine	0.012	mg/L	U	U		0.012	1
	Naphthalene	0.012	mg/L	U	U		0.012	1
	Nitrobenzene	0.012	mg/L	U	U		0.012	1
	Pentachlorophenol	0.024	mg/L	U	U		0.024	1
	Phenanthrene	0.012	mg/L	U	U		0.012	1
	Phenol	0.012	mg/L	U	U		0.012	1
	Pyrene	0.012	mg/L	U	U		0.012	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	U	U		0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.00069	mg/L	J	J		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-014
Sample ID: RQ0141 **Media:** Groundwater
Date Collected: 12/02/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dibromochloromethane	0.001	mg/L	U	U		0.001	1
	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0014	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-015
Sample ID: RQ0142 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	3-Nitrotoluene	0.00031	mg/L	U	UJ	P01	0.00031	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	HMX	0.00031	mg/L	U	U		0.00031	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D04,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00031	mg/L	U	U		0.00031	1
	Tetryl	0.00031	mg/L	U	U		0.00031	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	0.0298	mg/L	B	U	F01,F06	0.0105	1
	Antimony	0.00058	mg/L	B	J		0.00033	1
	Arsenic	0.0068	mg/L		=		0.00055	1
	Barium	0.0042	mg/L		=		0.00018	1
	Beryllium	0.000021	mg/L	U	U		0.000021	1
	Cadmium	0.00012	mg/L	U	U		0.00012	1
	Calcium	20.4	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0141	mg/L		=		0.000025	1
	Copper	0.0021	mg/L		U	F01,F07	0.000067	1
	Iron	0.0134	mg/L	B	U	F01,F06	0.0065	1
	Lead	0.00043	mg/L	B	U	F01,F06	0.00018	1
	Magnesium	8.97	mg/L		=		0.0038	1
	Manganese	0.682	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.0437	mg/L		=		0.0003	1
	Potassium	1.77	mg/L		=		0.0384	1
	Selenium	0.002	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	1.5	mg/L		=		0.0343	1
	Thallium	0.00015	mg/L	U	U		0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.0082	mg/L		J	I02	0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00006	mg/L	U	U		0.00006	1
	4,4'-DDE	0.00006	mg/L	U	U		0.00006	1
	4,4'-DDT	0.00006	mg/L	U	U		0.00006	1
	Aldrin	0.00006	mg/L	U	U		0.00006	1
	alpha-BHC	0.00006	mg/L	U	U		0.00006	1
	alpha-Chlordane	0.00006	mg/L	U	U		0.00006	1
	beta-BHC	0.00006	mg/L	U	UJ	P01	0.00006	1
	delta-BHC	0.00006	mg/L	U	U		0.00006	1
	Dieldrin	0.00006	mg/L	U	U		0.00006	1
	Endosulfan I	0.00006	mg/L	U	U		0.00006	1
	Endosulfan II	0.00006	mg/L	U	U		0.00006	1
	Endosulfan sulfate	0.00006	mg/L	U	U		0.00006	1

Ramsdell Quarry Phase I RI

Station: RQLmw-015
Sample ID: RQ0142 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.00006	mg/L	U	U		0.00006	1
	Endrin aldehyde	0.00006	mg/L	U	U		0.00006	1
	Endrin ketone	0.00006	mg/L	U	U		0.00006	1
	gamma-Chlordane	0.00006	mg/L	U	U		0.00006	1
	Heptachlor	0.00006	mg/L	U	U		0.00006	1
	Heptachlor epoxide	0.00006	mg/L	U	U		0.00006	1
	Lindane	0.00006	mg/L	U	U		0.00006	1
	Methoxychlor	0.00006	mg/L	U	U		0.00006	1
SW846 8082	PCB-1016	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1221	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1232	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1242	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1248	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1254	0.00059	mg/L	U	UJ	A01	0.00059	1
	PCB-1260	0.00059	mg/L	U	UJ	A01	0.00059	1
SW846 8081A	Toxaphene	0.0012	mg/L	U	U		0.0012	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,2-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,3-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,4-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	2,4,5-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4,6-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dimethylphenol	0.012	mg/L	U	U		0.012	1
	2,4-Dinitrophenol	0.024	mg/L	U	U		0.024	1
	2,4-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2,6-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2-Chloronaphthalene	0.012	mg/L	U	U		0.012	1
	2-Chlorophenol	0.012	mg/L	U	U		0.012	1
	2-Methyl-4,6-dinitrophenol	0.024	mg/L	U	U		0.024	1
	2-Methylnaphthalene	0.012	mg/L	U	U		0.012	1
	2-Methylphenol	0.012	mg/L	U	U		0.012	1
	2-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	2-Nitrophenol	0.012	mg/L	U	U		0.012	1
	3,3'-Dichlorobenzidine	0.024	mg/L	U	U		0.024	1
	3-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Bromophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Chloro-3-methylphenol	0.012	mg/L	U	U		0.012	1
	4-Chlorobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Chlorophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Methylphenol	0.012	mg/L	U	U		0.012	1
	4-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Nitrophenol	0.024	mg/L	U	U		0.024	1
	Acenaphthene	0.012	mg/L	U	U		0.012	1
	Acenaphthylene	0.012	mg/L	U	U		0.012	1
	Anthracene	0.012	mg/L	U	U		0.012	1
	Benz(a)anthracene	0.012	mg/L	U	U		0.012	1
	Benzenemethanol	0.012	mg/L	U	U		0.012	1
	Benzo(a)pyrene	0.012	mg/L	U	U		0.012	1
	Benzo(b)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzo(ghi)perylene	0.012	mg/L	U	U		0.012	1
	Benzo(k)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzoic acid	0.024	mg/L	U	U		0.024	1
	Bis(2-chloroethoxy)methane	0.012	mg/L	U	U		0.012	1

Station: RQLmw-015
Sample ID: RQ0142 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-chloroisopropyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-ethylhexyl)phthalate	0.012	mg/L	B	U	F01,F06	0.012	1
	Butyl benzyl phthalate	0.012	mg/L	U	U		0.012	1
	Carbazole	0.012	mg/L	U	U		0.012	1
	Chrysene	0.012	mg/L	U	U		0.012	1
	Di-n-butyl phthalate	0.012	mg/L	U	U		0.012	1
	Di-n-octylphthalate	0.012	mg/L	U	U		0.012	1
	Dibenz(a,h)anthracene	0.012	mg/L	U	U		0.012	1
	Dibenzofuran	0.012	mg/L	U	U		0.012	1
	Diethyl phthalate	0.012	mg/L	U	U		0.012	1
	Dimethyl phthalate	0.012	mg/L	U	U		0.012	1
	Fluoranthene	0.012	mg/L	U	U		0.012	1
	Fluorene	0.012	mg/L	U	U		0.012	1
	Hexachlorobenzene	0.012	mg/L	U	U		0.012	1
	Hexachlorobutadiene	0.012	mg/L	U	U		0.012	1
	Hexachlorocyclopentadiene	0.012	mg/L	U	U		0.012	1
	Hexachloroethane	0.012	mg/L	U	U		0.012	1
	Indeno(1,2,3-cd)pyrene	0.012	mg/L	U	U		0.012	1
	Isophorone	0.012	mg/L	U	U		0.012	1
	N-Nitroso-di-n-propylamine	0.012	mg/L	U	U		0.012	1
	N-Nitrosodiphenylamine	0.012	mg/L	U	U		0.012	1
	Naphthalene	0.012	mg/L	U	U		0.012	1
	Nitrobenzene	0.012	mg/L	U	U		0.012	1
	Pentachlorophenol	0.024	mg/L	U	U		0.024	1
	Phenanthrene	0.012	mg/L	U	U		0.012	1
	Phenol	0.012	mg/L	U	U		0.012	1
	Pyrene	0.012	mg/L	U	U		0.012	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	JB	U	F01,F06	0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.0033	mg/L		=		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-015
Sample ID: RQ0142 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0033	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Station: RQLmw-016
Sample ID: RQ0143 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	3-Nitrotoluene	0.00031	mg/L	U	UJ	P01	0.00031	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	HMX	0.00031	mg/L	U	U		0.00031	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D04,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00031	mg/L	U	U		0.00031	1
	Tetryl	0.00031	mg/L	U	U		0.00031	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	0.0413	mg/L		U	F01,F07	0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.0025	mg/L		=		0.00055	1
	Barium	0.0261	mg/L		=		0.00018	1
	Beryllium	0.000076	mg/L	B	J		0.000021	1
	Cadmium	0.00012	mg/L	U	U		0.00012	1
	Calcium	452	mg/L		=		0.0632	2
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.0143	mg/L		=		0.00005	2
	Copper	0.00024	mg/L	B	U	F01,F06	0.00013	2
	Iron	7.25	mg/L		=		0.0065	1
	Lead	0.00029	mg/L	B	U	F01,F06	0.00018	1
	Magnesium	57.3	mg/L		=		0.0038	1
	Manganese	6.17	mg/L		=		0.00019	2
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.062	mg/L		=		0.0006	2
	Potassium	2.67	mg/L		=		0.0384	1
	Selenium	0.002	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	6.82	mg/L		=		0.0343	1
	Thallium	0.00026	mg/L	B	U	F06	0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.0097	mg/L		J	I02	0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00006	mg/L	U	U		0.00006	1
	4,4'-DDE	0.00006	mg/L	U	U		0.00006	1
	4,4'-DDT	0.00006	mg/L	U	U		0.00006	1
	Aldrin	0.00006	mg/L	U	U		0.00006	1
	alpha-BHC	0.00006	mg/L	U	U		0.00006	1
	alpha-Chlordane	0.00006	mg/L	U	U		0.00006	1
	beta-BHC	0.00006	mg/L	U	UJ	P01	0.00006	1
	delta-BHC	0.00006	mg/L	U	U		0.00006	1
	Dieldrin	0.00006	mg/L	U	U		0.00006	1
	Endosulfan I	0.00006	mg/L	U	U		0.00006	1
	Endosulfan II	0.00006	mg/L	U	U		0.00006	1
	Endosulfan sulfate	0.00006	mg/L	U	U		0.00006	1

Station: RQLmw-016
Sample ID: RQ0143 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.00006	mg/L	U	U		0.00006	1
	Endrin aldehyde	0.00006	mg/L	U	U		0.00006	1
	Endrin ketone	0.00006	mg/L	U	U		0.00006	1
	gamma-Chlordane	0.00006	mg/L	U	U		0.00006	1
	Heptachlor	0.00006	mg/L	U	U		0.00006	1
	Heptachlor epoxide	0.00006	mg/L	U	U		0.00006	1
	Lindane	0.00006	mg/L	U	U		0.00006	1
	Methoxychlor	0.00006	mg/L	U	U		0.00006	1
SW846 8082	PCB-1016	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1221	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1232	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1242	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1248	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1254	0.0006	mg/L	U	UJ	A01	0.0006	1
	PCB-1260	0.0006	mg/L	U	UJ	A01	0.0006	1
SW846 8081A	Toxaphene	0.0013	mg/L	U	U		0.0013	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,2-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,3-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	1,4-Dichlorobenzene	0.012	mg/L	U	U		0.012	1
	2,4,5-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4,6-Trichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dichlorophenol	0.012	mg/L	U	U		0.012	1
	2,4-Dimethylphenol	0.012	mg/L	U	U		0.012	1
	2,4-Dinitrophenol	0.024	mg/L	U	U		0.024	1
	2,4-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2,6-Dinitrotoluene	0.012	mg/L	U	U		0.012	1
	2-Chloronaphthalene	0.012	mg/L	U	U		0.012	1
	2-Chlorophenol	0.012	mg/L	U	U		0.012	1
	2-Methyl-4,6-dinitrophenol	0.024	mg/L	U	U		0.024	1
	2-Methylnaphthalene	0.012	mg/L	U	U		0.012	1
	2-Methylphenol	0.012	mg/L	U	U		0.012	1
	2-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	2-Nitrophenol	0.012	mg/L	U	U		0.012	1
	3,3'-Dichlorobenzidine	0.024	mg/L	U	U		0.024	1
	3-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Bromophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Chloro-3-methylphenol	0.012	mg/L	U	U		0.012	1
	4-Chlorobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Chlorophenyl phenyl ether	0.012	mg/L	U	U		0.012	1
	4-Methylphenol	0.012	mg/L	U	U		0.012	1
	4-Nitrobenzenamine	0.012	mg/L	U	U		0.012	1
	4-Nitrophenol	0.024	mg/L	U	U		0.024	1
	Acenaphthene	0.012	mg/L	U	U		0.012	1
	Acenaphthylene	0.012	mg/L	U	U		0.012	1
	Anthracene	0.012	mg/L	U	U		0.012	1
	Benz(a)anthracene	0.012	mg/L	U	U		0.012	1
	Benzenemethanol	0.012	mg/L	U	U		0.012	1
	Benzo(a)pyrene	0.012	mg/L	U	U		0.012	1
	Benzo(b)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzo(ghi)perylene	0.012	mg/L	U	U		0.012	1
	Benzo(k)fluoranthene	0.012	mg/L	U	U		0.012	1
	Benzoic acid	0.024	mg/L	U	U		0.024	1
	Bis(2-chloroethoxy)methane	0.012	mg/L	U	U		0.012	1

Station: RQLmw-016
Sample ID: RQ0143 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-chloroisopropyl) ether	0.012	mg/L	U	U		0.012	1
	Bis(2-ethylhexyl)phthalate	0.012	mg/L	JB	U	F01,F06	0.012	1
	Butyl benzyl phthalate	0.012	mg/L	U	U		0.012	1
	Carbazole	0.012	mg/L	U	U		0.012	1
	Chrysene	0.012	mg/L	U	U		0.012	1
	Di-n-butyl phthalate	0.012	mg/L	U	U		0.012	1
	Di-n-octylphthalate	0.012	mg/L	U	U		0.012	1
	Dibenz(a,h)anthracene	0.012	mg/L	U	U		0.012	1
	Dibenzofuran	0.012	mg/L	U	U		0.012	1
	Diethyl phthalate	0.012	mg/L	U	U		0.012	1
	Dimethyl phthalate	0.012	mg/L	U	U		0.012	1
	Fluoranthene	0.012	mg/L	U	U		0.012	1
	Fluorene	0.012	mg/L	U	U		0.012	1
	Hexachlorobenzene	0.012	mg/L	U	U		0.012	1
	Hexachlorobutadiene	0.012	mg/L	U	U		0.012	1
	Hexachlorocyclopentadiene	0.012	mg/L	U	U		0.012	1
	Hexachloroethane	0.012	mg/L	U	U		0.012	1
	Indeno(1,2,3-cd)pyrene	0.012	mg/L	U	U		0.012	1
	Isophorone	0.012	mg/L	U	U		0.012	1
	N-Nitroso-di-n-propylamine	0.012	mg/L	U	U		0.012	1
	N-Nitrosodiphenylamine	0.012	mg/L	U	U		0.012	1
	Naphthalene	0.012	mg/L	U	U		0.012	1
	Nitrobenzene	0.012	mg/L	U	U		0.012	1
	Pentachlorophenol	0.024	mg/L	U	U		0.024	1
	Phenanthrene	0.012	mg/L	U	U		0.012	1
	Phenol	0.012	mg/L	U	U		0.012	1
	Pyrene	0.012	mg/L	U	U		0.012	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.005	mg/L	JB	U	F01,F06	0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.0079	mg/L		=		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-016
Sample ID: RQ0143 **Media:** Groundwater
Date Collected: 12/04/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0022	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

Station: RQLmw-017
Sample ID: RQ0144 **Media:** Groundwater
Date Collected: 12/01/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014T	Cyanide	0.01	mg/L	U	U		0.01	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	1,3-Dinitrobenzene	0.00016	mg/L	U	U		0.00016	1
	2,4,6-Trinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2,4-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	2,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Amino-4,6-Dinitrotoluene	0.00016	mg/L	U	U		0.00016	1
	2-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	3-Nitrotoluene	0.00031	mg/L	U	UJ	P01	0.00031	1
	4-Amino-2,6-Dinitrotoluene	0.00016	mg/L	U	UJ	P01	0.00016	1
	4-Nitrotoluene	0.00031	mg/L	U	U		0.00031	1
	HMX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Nitrobenzene	0.00016	mg/L	U	U		0.00016	1
SW846 9056M	Nitrocellulose	0.18	mg/L	U	UJ	D05,P02	0.18	1
SW846 8330	Nitroglycerin	0.016	mg/L	U	U		0.016	1
	Nitroguanidine	0.01	mg/L	U	UJ	A01	0.01	1
	RDX	0.00031	mg/L	U	UJ	P01	0.00031	1
	Tetryl	0.00031	mg/L	U	U		0.00031	1
Filtered Inorganics	**GPL**							
SW846 6020	Aluminum	0.0788	mg/L		=		0.0105	1
	Antimony	0.00033	mg/L	U	U		0.00033	1
	Arsenic	0.00095	mg/L	B	J		0.00055	1
	Barium	0.0167	mg/L		J	F10	0.00018	1
	Beryllium	0.00015	mg/L		=		0.000021	1
	Cadmium	0.00012	mg/L	U	U		0.00012	1
	Calcium	81.3	mg/L		=		0.0316	1
	Chromium	0.00091	mg/L	U	U		0.00091	1
	Cobalt	0.07	mg/L		=		0.000025	1
	Copper	0.0022	mg/L		J	F10	0.000067	1
	Iron	0.0065	mg/L	U	U		0.0065	1
	Lead	0.00018	mg/L	U	U		0.00018	1
	Magnesium	26.3	mg/L		=		0.0038	1
	Manganese	4.63	mg/L		=		0.000095	1
SW846 7470A	Mercury	0.0001	mg/L	U	U		0.0001	1
SW846 6020	Nickel	0.306	mg/L		=		0.0003	1
	Potassium	3.24	mg/L		=		0.0384	1
	Selenium	0.0022	mg/L	B	U	F01,F06	0.0013	2
	Silver	0.00014	mg/L	U	U		0.00014	1
	Sodium	5.12	mg/L		=		0.0343	1
	Thallium	0.00015	mg/L	U	U		0.00015	1
	Vanadium	0.0012	mg/L	U	U		0.0012	1
	Zinc	0.312	mg/L		=		0.0006	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.00006	mg/L	U	UJ	P02	0.00006	1
	4,4'-DDE	0.00006	mg/L	U	UJ	P02	0.00006	1
	4,4'-DDT	0.00006	mg/L	U	U		0.00006	1
	Aldrin	0.00006	mg/L	U	UJ	P02	0.00006	1
	alpha-BHC	0.00006	mg/L	U	UJ	P02	0.00006	1
	alpha-Chlordane	0.00006	mg/L	U	UJ	P02	0.00006	1
	beta-BHC	0.00006	mg/L	U	U		0.00006	1
	delta-BHC	0.00006	mg/L	U	U		0.00006	1
	Dieldrin	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan I	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan II	0.00006	mg/L	U	UJ	P02	0.00006	1
	Endosulfan sulfate	0.00006	mg/L	U	U		0.00006	1

Ramsdell Quarry Phase I RI

Station: RQLmw-017
Sample ID: RQ0144 **Media:** Groundwater
Date Collected: 12/01/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.00006	mg/L	U	U		0.00006	1
	Endrin aldehyde	0.00006	mg/L	U	U		0.00006	1
	Endrin ketone	0.00006	mg/L	U	UJ	P02	0.00006	1
	gamma-Chlordane	0.00006	mg/L	U	UJ	P02	0.00006	1
	Heptachlor	0.00006	mg/L	U	U		0.00006	1
	Heptachlor epoxide	0.00006	mg/L	U	UJ	P02	0.00006	1
	Lindane	0.00006	mg/L	U	U		0.00006	1
	Methoxychlor	0.00006	mg/L	U	U		0.00006	1
SW846 8082	PCB-1016	0.00059	mg/L	U	U		0.00059	1
	PCB-1221	0.00059	mg/L	U	U		0.00059	1
	PCB-1232	0.00059	mg/L	U	U		0.00059	1
	PCB-1242	0.00059	mg/L	U	U		0.00059	1
	PCB-1248	0.00059	mg/L	U	U		0.00059	1
	PCB-1254	0.00059	mg/L	U	U		0.00059	1
	PCB-1260	0.00059	mg/L	U	U		0.00059	1
SW846 8081A	Toxaphene	0.0012	mg/L	U	U		0.0012	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	0.011	mg/L	U	U		0.011	1
	1,2-Dichlorobenzene	0.011	mg/L	U	U		0.011	1
	1,3-Dichlorobenzene	0.011	mg/L	U	U		0.011	1
	1,4-Dichlorobenzene	0.011	mg/L	U	U		0.011	1
	2,4,5-Trichlorophenol	0.011	mg/L	U	U		0.011	1
	2,4,6-Trichlorophenol	0.011	mg/L	U	U		0.011	1
	2,4-Dichlorophenol	0.011	mg/L	U	U		0.011	1
	2,4-Dimethylphenol	0.011	mg/L	U	U		0.011	1
	2,4-Dinitrophenol	0.023	mg/L	U	U		0.023	1
	2,4-Dinitrotoluene	0.011	mg/L	U	U		0.011	1
	2,6-Dinitrotoluene	0.011	mg/L	U	U		0.011	1
	2-Chloronaphthalene	0.011	mg/L	U	U		0.011	1
	2-Chlorophenol	0.011	mg/L	U	U		0.011	1
	2-Methyl-4,6-dinitrophenol	0.023	mg/L	U	U		0.023	1
	2-Methylnaphthalene	0.011	mg/L	U	U		0.011	1
	2-Methylphenol	0.011	mg/L	U	U		0.011	1
	2-Nitrobenzenamine	0.011	mg/L	U	U		0.011	1
	2-Nitrophenol	0.011	mg/L	U	U		0.011	1
	3,3'-Dichlorobenzidine	0.023	mg/L	U	U		0.023	1
	3-Nitrobenzenamine	0.011	mg/L	U	U		0.011	1
	4-Bromophenyl phenyl ether	0.011	mg/L	U	U		0.011	1
	4-Chloro-3-methylphenol	0.011	mg/L	U	U		0.011	1
	4-Chlorobenzenamine	0.011	mg/L	U	U		0.011	1
	4-Chlorophenyl phenyl ether	0.011	mg/L	U	U		0.011	1
	4-Methylphenol	0.011	mg/L	U	U		0.011	1
	4-Nitrobenzenamine	0.011	mg/L	U	U		0.011	1
	4-Nitrophenol	0.023	mg/L	U	U		0.023	1
	Acenaphthene	0.011	mg/L	U	U		0.011	1
	Acenaphthylene	0.011	mg/L	U	U		0.011	1
	Anthracene	0.011	mg/L	U	U		0.011	1
	Benz(a)anthracene	0.011	mg/L	U	U		0.011	1
	Benzenemethanol	0.011	mg/L	U	U		0.011	1
	Benzo(a)pyrene	0.011	mg/L	U	U		0.011	1
	Benzo(b)fluoranthene	0.011	mg/L	U	U		0.011	1
	Benzo(ghi)perylene	0.011	mg/L	U	U		0.011	1
	Benzo(k)fluoranthene	0.011	mg/L	U	U		0.011	1
	Benzoic acid	0.023	mg/L	U	U		0.023	1
	Bis(2-chloroethoxy)methane	0.011	mg/L	U	U		0.011	1

Station: RQLmw-017
Sample ID: RQ0144 **Media:** Groundwater
Date Collected: 12/01/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	0.011	mg/L	U	U		0.011	1
	Bis(2-chloroisopropyl) ether	0.011	mg/L	U	U		0.011	1
	Bis(2-ethylhexyl)phthalate	0.011	mg/L	JB	U	F01,F06	0.011	1
	Butyl benzyl phthalate	0.011	mg/L	U	U		0.011	1
	Carbazole	0.011	mg/L	U	U		0.011	1
	Chrysene	0.011	mg/L	U	U		0.011	1
	Di-n-butyl phthalate	0.011	mg/L	JB	U	F01,F06	0.011	1
	Di-n-octylphthalate	0.011	mg/L	U	U		0.011	1
	Dibenz(a,h)anthracene	0.011	mg/L	U	U		0.011	1
	Dibenzofuran	0.011	mg/L	U	U		0.011	1
	Diethyl phthalate	0.011	mg/L	U	U		0.011	1
	Dimethyl phthalate	0.011	mg/L	U	U		0.011	1
	Fluoranthene	0.011	mg/L	U	U		0.011	1
	Fluorene	0.011	mg/L	U	U		0.011	1
	Hexachlorobenzene	0.011	mg/L	U	U		0.011	1
	Hexachlorobutadiene	0.011	mg/L	U	U		0.011	1
	Hexachlorocyclopentadiene	0.011	mg/L	U	U		0.011	1
	Hexachloroethane	0.011	mg/L	U	U		0.011	1
	Indeno(1,2,3-cd)pyrene	0.011	mg/L	U	U		0.011	1
	Isophorone	0.011	mg/L	U	U		0.011	1
	N-Nitroso-di-n-propylamine	0.011	mg/L	U	U		0.011	1
	N-Nitrosodiphenylamine	0.011	mg/L	U	U		0.011	1
	Naphthalene	0.011	mg/L	U	U		0.011	1
	Nitrobenzene	0.011	mg/L	U	U		0.011	1
	Pentachlorophenol	0.023	mg/L	U	U		0.023	1
	Phenanthrene	0.011	mg/L	U	U		0.011	1
	Phenol	0.011	mg/L	U	U		0.011	1
	Pyrene	0.011	mg/L	U	U		0.011	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2,2-Tetrachloroethane	0.001	mg/L	U	U		0.001	1
	1,1,2-Trichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,1-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dibromoethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethane	0.001	mg/L	U	U		0.001	1
	1,2-Dichloroethene	0.001	mg/L	U	U		0.001	1
	1,2-Dichloropropane	0.001	mg/L	U	U		0.001	1
	2-Butanone	0.005	mg/L	U	U		0.005	1
	2-Hexanone	0.005	mg/L	U	U		0.005	1
	4-Methyl-2-pentanone	0.005	mg/L	U	U		0.005	1
	Acetone	0.0062	mg/L	B	U	F01,F07	0.005	1
	Benzene	0.001	mg/L	U	U		0.001	1
	Bromochloromethane	0.001	mg/L	U	U		0.001	1
	Bromodichloromethane	0.001	mg/L	U	U		0.001	1
	Bromoform	0.001	mg/L	U	U		0.001	1
	Bromomethane	0.001	mg/L	U	U		0.001	1
	Carbon disulfide	0.00095	mg/L	J	J		0.001	1
	Carbon tetrachloride	0.001	mg/L	U	U		0.001	1
	Chlorobenzene	0.001	mg/L	U	U		0.001	1
	Chloroethane	0.001	mg/L	U	U		0.001	1
	Chloroform	0.001	mg/L	U	U		0.001	1
	Chloromethane	0.001	mg/L	U	U		0.001	1
	cis-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Dibromochloromethane	0.001	mg/L	U	U		0.001	1

Ramsdell Quarry Phase I RI

Station: RQLmw-017
Sample ID: RQ0144 **Media:** Groundwater
Date Collected: 12/01/2003 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	0.001	mg/L	U	U		0.001	1
	Ethylbenzene	0.001	mg/L	U	U		0.001	1
	Methylene chloride	0.0013	mg/L	B	U	F01,F07	0.001	1
	Styrene	0.001	mg/L	U	U		0.001	1
	Tetrachloroethene	0.001	mg/L	U	U		0.001	1
	Toluene	0.001	mg/L	U	U		0.001	1
	trans-1,3-Dichloropropene	0.001	mg/L	U	U		0.001	1
	Trichloroethene	0.001	mg/L	U	U		0.001	1
	Vinyl chloride	0.001	mg/L	U	U		0.001	1

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Second Sampling Event

May 2004

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Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0151 **Media:** Groundwater
Date Collected: 05/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	UJ	C08	0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	656	UG/L		=		5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	0.35	UG/L	U	U		0.35	1
	Barium	30.1	UG/L		=		0.099	1
	Beryllium	0.061	UG/L	B	J		0.025	1
	Cadmium	0.21	UG/L	B	J		0.18	1
	Calcium	28600	UG/L		=		33.9	1
	Chromium	1.9	UG/L	B	J		1.1	1
	Cobalt	6.4	UG/L		=		0.015	1
	Copper	5.2	UG/L		U	F03,F07	0.045	1
	Iron	18.6	UG/L	B	U	F01,F06	8.8	1
	Lead	0.95	UG/L		=		0.2	1
	Magnesium	8730	UG/L		=		6.5	1
	Manganese	214	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	22.3	UG/L		=		0.28	1
	Potassium	3930	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	2390	UG/L		=		56	1
	Thallium	0.44	UG/L		U	F01,F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	39.9	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDE	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDT	0.06	UG/L	U	UJ	A01	0.06	1
	Aldrin	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-BHC	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	beta-BHC	0.06	UG/L	U	UJ	A01,P01	0.06	1
	delta-BHC	0.06	UG/L	U	UJ	A01,P02	0.06	1
	Dieldrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan I	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan II	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan sulfate	0.06	UG/L	U	UJ	A01	0.06	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0151 **Media:** Groundwater
Date Collected: 05/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin aldehyde	0.06	UG/L	U	UJ	A01,P01	0.06	1
	Endrin ketone	0.06	UG/L	U	UJ	A01	0.06	1
	gamma-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor epoxide	0.06	UG/L	U	UJ	A01	0.06	1
	Lindane	0.06	UG/L	U	UJ	A01	0.06	1
	Methoxychlor	0.06	UG/L	U	UJ	A01	0.06	1
SW846 8082	PCB-1016	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1221	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1232	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1242	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1248	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1254	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1260	1.2	UG/L	U	UJ	A01	1.2	1
SW846 8081A	Toxaphene	1.2	UG/L	U	UJ	A01	1.2	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	12	UG/L	U	U		12	1
	1,2-Dichlorobenzene	12	UG/L	U	U		12	1
	1,3-Dichlorobenzene	12	UG/L	U	U		12	1
	1,4-Dichlorobenzene	12	UG/L	U	U		12	1
	2,4,5-Trichlorophenol	12	UG/L	U	U		12	1
	2,4,6-Trichlorophenol	12	UG/L	U	U		12	1
	2,4-Dichlorophenol	12	UG/L	U	U		12	1
	2,4-Dimethylphenol	12	UG/L	U	U		12	1
	2,4-Dinitrophenol	24	UG/L	U	U		24	1
	2,4-Dinitrotoluene	12	UG/L	U	U		12	1
	2,6-Dinitrotoluene	12	UG/L	U	U		12	1
	2-Chloronaphthalene	12	UG/L	U	U		12	1
	2-Chlorophenol	12	UG/L	U	U		12	1
	2-Methyl-4,6-dinitrophenol	24	UG/L	U	U		24	1
	2-Methylnaphthalene	12	UG/L	U	U		12	1
	2-Methylphenol	12	UG/L	U	U		12	1
	2-Nitrobenzenamine	12	UG/L	U	U		12	1
	2-Nitrophenol	12	UG/L	U	U		12	1
	3,3'-Dichlorobenzidine	24	UG/L	U	U		24	1
	3-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Bromophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Chloro-3-methylphenol	12	UG/L	U	U		12	1
	4-Chlorobenzenamine	12	UG/L	U	U		12	1
	4-Chlorophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Methylphenol	12	UG/L	U	U		12	1
	4-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Nitrophenol	24	UG/L	U	U		24	1
	Acenaphthene	12	UG/L	U	U		12	1
	Acenaphthylene	12	UG/L	U	U		12	1
	Anthracene	12	UG/L	U	U		12	1
	Benz(a)anthracene	12	UG/L	U	U		12	1
	Benzenemethanol	12	UG/L	U	U		12	1
	Benzo(a)pyrene	12	UG/L	U	U		12	1
	Benzo(b)fluoranthene	12	UG/L	U	U		12	1
	Benzo(ghi)perylene	12	UG/L	U	U		12	1
	Benzo(k)fluoranthene	12	UG/L	U	U		12	1
	Benzoic acid	24	UG/L	U	U		24	1
	Bis(2-chloroethoxy)methane	12	UG/L	U	U		12	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0151 **Media:** Groundwater
Date Collected: 05/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	12	UG/L	U	U		12	1
	Bis(2-chloroisopropyl) ether	12	UG/L	U	U		12	1
	Bis(2-ethylhexyl)phthalate	22	UG/L		=		12	1
	Butyl benzyl phthalate	12	UG/L	U	U		12	1
	Carbazole	12	UG/L	U	U		12	1
	Chrysene	12	UG/L	U	U		12	1
	Di-n-butyl phthalate	2	UG/L	J	J		12	1
	Di-n-octylphthalate	12	UG/L	U	U		12	1
	Dibenz(a,h)anthracene	12	UG/L	U	U		12	1
	Dibenzofuran	12	UG/L	U	U		12	1
	Diethyl phthalate	12	UG/L	U	U		12	1
	Dimethyl phthalate	12	UG/L	U	U		12	1
	Fluoranthene	12	UG/L	U	U		12	1
	Fluorene	12	UG/L	U	U		12	1
	Hexachlorobenzene	12	UG/L	U	U		12	1
	Hexachlorobutadiene	12	UG/L	U	U		12	1
	Hexachlorocyclopentadiene	12	UG/L	U	U		12	1
	Hexachloroethane	12	UG/L	U	U		12	1
	Indeno(1,2,3-cd)pyrene	12	UG/L	U	U		12	1
	Isophorone	12	UG/L	U	U		12	1
	N-Nitroso-di-n-propylamine	12	UG/L	U	U		12	1
	N-Nitrosodiphenylamine	12	UG/L	U	U		12	1
	Naphthalene	12	UG/L	U	U		12	1
	Nitrobenzene	12	UG/L	U	U		12	1
	Pentachlorophenol	24	UG/L	U	U		24	1
	Phenanthrene	12	UG/L	U	U		12	1
	Phenol	12	UG/L	U	U		12	1
	Pyrene	12	UG/L	U	U		12	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dibromoethane	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	UJ	C05	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromochloromethane	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	3.2	UG/L		U	F03,F07	1	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-012
Sample ID: RQ0151 **Media:** Groundwater
Date Collected: 05/20/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	1.9	UG/L	B	U	F01,F07	1	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0152 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	U		0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	4530	UG/L		=		5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	1.2	UG/L	B	J		0.35	1
	Barium	31.6	UG/L		=		0.099	1
	Beryllium	0.39	UG/L		=		0.025	1
	Cadmium	0.33	UG/L	B	J		0.18	1
	Calcium	22500	UG/L		=		33.9	1
	Chromium	2.2	UG/L	B	J		1.1	1
	Cobalt	33.8	UG/L		=		0.015	1
	Copper	2.5	UG/L		U	F01,F07	0.045	1
	Iron	3330	UG/L		=		8.8	1
	Lead	0.33	UG/L	B	J		0.2	1
	Magnesium	11900	UG/L		=		6.5	1
	Manganese	461	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	72.4	UG/L		=		0.28	1
	Potassium	2460	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	19200	UG/L		=		56	1
	Thallium	1	UG/L		U	F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	179	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDE	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDT	0.06	UG/L	U	UJ	A01	0.06	1
	Aldrin	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-BHC	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	beta-BHC	0.06	UG/L	U	UJ	A01,P01	0.06	1
	delta-BHC	0.06	UG/L	U	UJ	A01,P02	0.06	1
	Dieldrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan I	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan II	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan sulfate	0.06	UG/L	U	UJ	A01	0.06	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0152 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin aldehyde	0.06	UG/L	U	UJ	A01,P01	0.06	1
	Endrin ketone	0.06	UG/L	U	UJ	A01	0.06	1
	gamma-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor epoxide	0.06	UG/L	U	UJ	A01	0.06	1
	Lindane	0.06	UG/L	U	UJ	A01	0.06	1
	Methoxychlor	0.06	UG/L	U	UJ	A01	0.06	1
SW846 8082	PCB-1016	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1221	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1232	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1242	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1248	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1254	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1260	1.3	UG/L	U	UJ	A01	1.3	1
SW846 8081A	Toxaphene	1.3	UG/L	U	UJ	A01	1.3	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	12	UG/L	U	U		12	1
	1,2-Dichlorobenzene	12	UG/L	U	U		12	1
	1,3-Dichlorobenzene	12	UG/L	U	U		12	1
	1,4-Dichlorobenzene	12	UG/L	U	U		12	1
	2,4,5-Trichlorophenol	12	UG/L	U	U		12	1
	2,4,6-Trichlorophenol	12	UG/L	U	U		12	1
	2,4-Dichlorophenol	12	UG/L	U	U		12	1
	2,4-Dimethylphenol	12	UG/L	U	U		12	1
	2,4-Dinitrophenol	24	UG/L	U	U		24	1
	2,4-Dinitrotoluene	12	UG/L	U	U		12	1
	2,6-Dinitrotoluene	12	UG/L	U	U		12	1
	2-Chloronaphthalene	12	UG/L	U	U		12	1
	2-Chlorophenol	12	UG/L	U	U		12	1
	2-Methyl-4,6-dinitrophenol	24	UG/L	U	U		24	1
	2-Methylnaphthalene	12	UG/L	U	U		12	1
	2-Methylphenol	12	UG/L	U	U		12	1
	2-Nitrobenzenamine	12	UG/L	U	U		12	1
	2-Nitrophenol	12	UG/L	U	U		12	1
	3,3'-Dichlorobenzidine	24	UG/L	U	U		24	1
	3-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Bromophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Chloro-3-methylphenol	12	UG/L	U	U		12	1
	4-Chlorobenzenamine	12	UG/L	U	U		12	1
	4-Chlorophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Methylphenol	12	UG/L	U	U		12	1
	4-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Nitrophenol	24	UG/L	U	U		24	1
	Acenaphthene	12	UG/L	U	U		12	1
	Acenaphthylene	12	UG/L	U	U		12	1
	Anthracene	12	UG/L	U	U		12	1
	Benz(a)anthracene	12	UG/L	U	U		12	1
	Benzenemethanol	12	UG/L	U	U		12	1
	Benzo(a)pyrene	12	UG/L	U	U		12	1
	Benzo(b)fluoranthene	12	UG/L	U	U		12	1
	Benzo(ghi)perylene	12	UG/L	U	U		12	1
	Benzo(k)fluoranthene	12	UG/L	U	U		12	1
	Benzoic acid	24	UG/L	U	U		24	1
	Bis(2-chloroethoxy)methane	12	UG/L	U	U		12	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0152 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	12	UG/L	U	U		12	1
	Bis(2-chloroisopropyl) ether	12	UG/L	U	U		12	1
	Bis(2-ethylhexyl)phthalate	4	UG/L	J	J		12	1
	Butyl benzyl phthalate	12	UG/L	U	U		12	1
	Carbazole	12	UG/L	U	U		12	1
	Chrysene	12	UG/L	U	U		12	1
	Di-n-butyl phthalate	1.5	UG/L	J	J		12	1
	Di-n-octylphthalate	12	UG/L	U	U		12	1
	Dibenz(a,h)anthracene	12	UG/L	U	U		12	1
	Dibenzofuran	12	UG/L	U	U		12	1
	Diethyl phthalate	12	UG/L	U	U		12	1
	Dimethyl phthalate	12	UG/L	U	U		12	1
	Fluoranthene	12	UG/L	U	U		12	1
	Fluorene	12	UG/L	U	U		12	1
	Hexachlorobenzene	12	UG/L	U	U		12	1
	Hexachlorobutadiene	12	UG/L	U	U		12	1
	Hexachlorocyclopentadiene	12	UG/L	U	U		12	1
	Hexachloroethane	12	UG/L	U	U		12	1
	Indeno(1,2,3-cd)pyrene	12	UG/L	U	U		12	1
	Isophorone	12	UG/L	U	U		12	1
	N-Nitroso-di-n-propylamine	12	UG/L	U	U		12	1
	N-Nitrosodiphenylamine	12	UG/L	U	U		12	1
	Naphthalene	12	UG/L	U	U		12	1
	Nitrobenzene	12	UG/L	U	U		12	1
	Pentachlorophenol	24	UG/L	U	U		24	1
	Phenanthrene	12	UG/L	U	U		12	1
	Phenol	12	UG/L	U	U		12	1
	Pyrene	12	UG/L	U	U		12	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dibromoethane	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	UJ	C05	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromochloromethane	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	1	UG/L	J	U	F03,F06	1	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1

Station: RQLmw-013
Sample ID: RQ0152 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	2.1	UG/L	B	U	F01,F07	1	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1

Station: RQLmw-013
Sample ID: RQ0159 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	U		0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	4560	UG/L		=		5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	1.4	UG/L		=		0.35	1
	Barium	32.1	UG/L		=		0.099	1
	Beryllium	0.37	UG/L		=		0.025	1
	Cadmium	0.36	UG/L	B	J		0.18	1
	Calcium	22400	UG/L		=		33.9	1
	Chromium	1.1	UG/L	U	U		1.1	1
	Cobalt	34.8	UG/L		=		0.015	1
	Copper	4.4	UG/L		U	F01,F07	0.045	1
	Iron	3370	UG/L		=		8.8	1
	Lead	0.41	UG/L	B	J		0.2	1
	Magnesium	11700	UG/L		=		6.5	1
	Manganese	469	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	73.5	UG/L		=		0.28	1
	Potassium	2440	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	19400	UG/L		=		56	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0159 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Filtered Inorganics	**GPL**							
SW846 6010B	Thallium	1.1	UG/L		U	F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	187	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDE	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDT	0.06	UG/L	U	UJ	A01	0.06	1
	Aldrin	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-BHC	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	beta-BHC	0.06	UG/L	U	UJ	A01,P01	0.06	1
	delta-BHC	0.06	UG/L	U	UJ	A01,P02	0.06	1
	Dieldrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan I	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan II	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan sulfate	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin aldehyde	0.06	UG/L	U	UJ	A01,P01	0.06	1
	Endrin ketone	0.06	UG/L	U	UJ	A01	0.06	1
	gamma-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor epoxide	0.06	UG/L	U	UJ	A01	0.06	1
	Lindane	0.06	UG/L	U	UJ	A01	0.06	1
	Methoxychlor	0.06	UG/L	U	UJ	A01	0.06	1
SW846 8082	PCB-1016	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1221	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1232	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1242	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1248	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1254	1.3	UG/L	U	UJ	A01	1.3	1
	PCB-1260	1.3	UG/L	U	UJ	A01	1.3	1
SW846 8081A	Toxaphene	1.3	UG/L	U	UJ	A01	1.3	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	13	UG/L	U	U		13	1
	1,2-Dichlorobenzene	13	UG/L	U	U		13	1
	1,3-Dichlorobenzene	13	UG/L	U	U		13	1
	1,4-Dichlorobenzene	13	UG/L	U	U		13	1
	2,4,5-Trichlorophenol	13	UG/L	U	U		13	1
	2,4,6-Trichlorophenol	13	UG/L	U	U		13	1
	2,4-Dichlorophenol	13	UG/L	U	U		13	1
	2,4-Dimethylphenol	13	UG/L	U	U		13	1
	2,4-Dinitrophenol	25	UG/L	U	U		25	1
	2,4-Dinitrotoluene	13	UG/L	U	U		13	1
	2,6-Dinitrotoluene	13	UG/L	U	U		13	1
	2-Chloronaphthalene	13	UG/L	U	U		13	1
	2-Chlorophenol	13	UG/L	U	U		13	1
	2-Methyl-4,6-dinitrophenol	25	UG/L	U	U		25	1
	2-Methylnaphthalene	13	UG/L	U	U		13	1
	2-Methylphenol	13	UG/L	U	U		13	1
	2-Nitrobenzenamine	13	UG/L	U	U		13	1
	2-Nitrophenol	13	UG/L	U	U		13	1
	3,3'-Dichlorobenzidine	25	UG/L	U	U		25	1
	3-Nitrobenzenamine	13	UG/L	U	U		13	1
	4-Bromophenyl phenyl ether	13	UG/L	U	U		13	1
	4-Chloro-3-methylphenol	13	UG/L	U	U		13	1

Station: RQLmw-013
Sample ID: RQ0159 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	4-Chlorobenzenamine	13	UG/L	U	U		13	1
	4-Chlorophenyl phenyl ether	13	UG/L	U	U		13	1
	4-Methylphenol	13	UG/L	U	U		13	1
	4-Nitrobenzenamine	13	UG/L	U	U		13	1
	4-Nitrophenol	25	UG/L	U	U		25	1
	Acenaphthene	13	UG/L	U	U		13	1
	Acenaphthylene	13	UG/L	U	U		13	1
	Anthracene	13	UG/L	U	U		13	1
	Benz(a)anthracene	13	UG/L	U	U		13	1
	Benzenemethanol	13	UG/L	U	U		13	1
	Benzo(a)pyrene	13	UG/L	U	U		13	1
	Benzo(b)fluoranthene	13	UG/L	U	U		13	1
	Benzo(ghi)perylene	13	UG/L	U	U		13	1
	Benzo(k)fluoranthene	13	UG/L	U	U		13	1
	Benzoic acid	25	UG/L	U	U		25	1
	Bis(2-chloroethoxy)methane	13	UG/L	U	U		13	1
	Bis(2-chloroethyl) ether	13	UG/L	U	U		13	1
	Bis(2-chloroisopropyl) ether	13	UG/L	U	U		13	1
	Bis(2-ethylhexyl)phthalate	3.3	UG/L	J	J		13	1
	Butyl benzyl phthalate	13	UG/L	U	U		13	1
	Carbazole	13	UG/L	U	U		13	1
	Chrysene	13	UG/L	U	U		13	1
	Di-n-butyl phthalate	1.5	UG/L	J	J		13	1
	Di-n-octylphthalate	13	UG/L	U	U		13	1
	Dibenz(a,h)anthracene	13	UG/L	U	U		13	1
	Dibenzofuran	13	UG/L	U	U		13	1
	Diethyl phthalate	13	UG/L	U	U		13	1
	Dimethyl phthalate	13	UG/L	U	U		13	1
	Fluoranthene	13	UG/L	U	U		13	1
	Fluorene	13	UG/L	U	U		13	1
	Hexachlorobenzene	13	UG/L	U	U		13	1
	Hexachlorobutadiene	13	UG/L	U	U		13	1
	Hexachlorocyclopentadiene	13	UG/L	U	U		13	1
	Hexachloroethane	13	UG/L	U	U		13	1
	Indeno(1,2,3-cd)pyrene	13	UG/L	U	U		13	1
	Isophorone	13	UG/L	U	U		13	1
	N-Nitroso-di-n-propylamine	13	UG/L	U	U		13	1
	N-Nitrosodiphenylamine	13	UG/L	U	U		13	1
	Naphthalene	13	UG/L	U	U		13	1
	Nitrobenzene	13	UG/L	U	U		13	1
	Pentachlorophenol	25	UG/L	U	U		25	1
	Phenanthrene	13	UG/L	U	U		13	1
	Phenol	13	UG/L	U	U		13	1
	Pyrene	13	UG/L	U	U		13	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dibromoethane	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1

Ramsdell Quarry Phase I RI

Station: RQLmw-013
Sample ID: RQ0159 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Field Duplicate

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	UJ	C05	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromochloromethane	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	1.3	UG/L		U	F03,F07	1	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1
	Dimethylbenzene	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	1.9	UG/L	B	U	F01,F07	1	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-014
Sample ID: RQ0153 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	U		0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	15.1	UG/L	B	U	F01,F06	5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	0.35	UG/L	U	U		0.35	1
	Barium	27.6	UG/L		=		0.099	1
	Beryllium	0.025	UG/L	U	U		0.025	1
	Cadmium	0.18	UG/L	U	U		0.18	1
	Calcium	21000	UG/L		=		33.9	1
	Chromium	1.8	UG/L	B	J		1.1	1
	Cobalt	9.4	UG/L		=		0.015	1
	Copper	1.4	UG/L		U	F01,F07	0.045	1
	Iron	6740	UG/L		=		8.8	1
	Lead	0.2	UG/L	B	J		0.2	1
	Magnesium	10300	UG/L		=		6.5	1
	Manganese	2080	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	19.3	UG/L		=		0.28	1
	Potassium	2670	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	4010	UG/L		=		56	1
	Thallium	0.16	UG/L	B	U	F01,F06	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	22.7	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.08	UG/L	U	UJ	A01	0.08	1
	4,4'-DDE	0.08	UG/L	U	UJ	A01	0.08	1
	4,4'-DDT	0.08	UG/L	U	UJ	A01	0.08	1
	Aldrin	0.08	UG/L	U	UJ	A01	0.08	1
	alpha-BHC	0.08	UG/L	U	UJ	A01	0.08	1
	alpha-Chlordane	0.08	UG/L	U	UJ	A01	0.08	1
	beta-BHC	0.08	UG/L	U	UJ	A01,P01	0.08	1
	delta-BHC	0.08	UG/L	U	UJ	A01,P02	0.08	1
	Dieldrin	0.08	UG/L	U	UJ	A01	0.08	1
	Endosulfan I	0.08	UG/L	U	UJ	A01	0.08	1
	Endosulfan II	0.08	UG/L	U	UJ	A01	0.08	1
	Endosulfan sulfate	0.08	UG/L	U	UJ	A01	0.08	1

Station: RQLmw-014
Sample ID: RQ0153 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.08	UG/L	U	UJ	A01	0.08	1
	Endrin aldehyde	0.08	UG/L	U	UJ	A01,P01	0.08	1
	Endrin ketone	0.08	UG/L	U	UJ	A01	0.08	1
	gamma-Chlordane	0.08	UG/L	U	UJ	A01	0.08	1
	Heptachlor	0.08	UG/L	U	UJ	A01	0.08	1
	Heptachlor epoxide	0.08	UG/L	U	UJ	A01	0.08	1
	Lindane	0.08	UG/L	U	UJ	A01	0.08	1
	Methoxychlor	0.08	UG/L	U	UJ	A01	0.08	1
SW846 8082	PCB-1016	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1221	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1232	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1242	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1248	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1254	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1260	1.5	UG/L	U	UJ	A01	1.5	1
SW846 8081A	Toxaphene	1.5	UG/L	U	UJ	A01	1.5	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	13	UG/L	U	U		13	1
	1,2-Dichlorobenzene	13	UG/L	U	U		13	1
	1,3-Dichlorobenzene	13	UG/L	U	U		13	1
	1,4-Dichlorobenzene	13	UG/L	U	U		13	1
	2,4,5-Trichlorophenol	13	UG/L	U	U		13	1
	2,4,6-Trichlorophenol	13	UG/L	U	U		13	1
	2,4-Dichlorophenol	13	UG/L	U	U		13	1
	2,4-Dimethylphenol	13	UG/L	U	U		13	1
	2,4-Dinitrophenol	25	UG/L	U	U		25	1
	2,4-Dinitrotoluene	13	UG/L	U	U		13	1
	2,6-Dinitrotoluene	13	UG/L	U	U		13	1
	2-Chloronaphthalene	13	UG/L	U	U		13	1
	2-Chlorophenol	13	UG/L	U	U		13	1
	2-Methyl-4,6-dinitrophenol	25	UG/L	U	U		25	1
	2-Methylnaphthalene	13	UG/L	U	U		13	1
	2-Methylphenol	13	UG/L	U	U		13	1
	2-Nitrobenzenamine	13	UG/L	U	U		13	1
	2-Nitrophenol	13	UG/L	U	U		13	1
	3,3'-Dichlorobenzidine	25	UG/L	U	U		25	1
	3-Nitrobenzenamine	13	UG/L	U	U		13	1
	4-Bromophenyl phenyl ether	13	UG/L	U	U		13	1
	4-Chloro-3-methylphenol	13	UG/L	U	U		13	1
	4-Chlorobenzenamine	13	UG/L	U	U		13	1
	4-Chlorophenyl phenyl ether	13	UG/L	U	U		13	1
	4-Methylphenol	13	UG/L	U	U		13	1
	4-Nitrobenzenamine	13	UG/L	U	U		13	1
	4-Nitrophenol	25	UG/L	U	U		25	1
	Acenaphthene	13	UG/L	U	U		13	1
	Acenaphthylene	13	UG/L	U	U		13	1
	Anthracene	13	UG/L	U	U		13	1
	Benz(a)anthracene	13	UG/L	U	U		13	1
	Benzenemethanol	13	UG/L	U	U		13	1
	Benzo(a)pyrene	13	UG/L	U	U		13	1
	Benzo(b)fluoranthene	13	UG/L	U	U		13	1
	Benzo(ghi)perylene	13	UG/L	U	U		13	1
	Benzo(k)fluoranthene	13	UG/L	U	U		13	1
	Benzoic acid	25	UG/L	U	U		25	1
	Bis(2-chloroethoxy)methane	13	UG/L	U	U		13	1

Station: RQLmw-014
Sample ID: RQ0153 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	13	UG/L	U	U		13	1
	Bis(2-chloroisopropyl) ether	13	UG/L	U	U		13	1
	Bis(2-ethylhexyl)phthalate	3.3	UG/L	J	J		13	1
	Butyl benzyl phthalate	13	UG/L	U	U		13	1
	Carbazole	13	UG/L	U	U		13	1
	Chrysene	13	UG/L	U	U		13	1
	Di-n-butyl phthalate	2	UG/L	J	J		13	1
	Di-n-octylphthalate	13	UG/L	U	U		13	1
	Dibenz(a,h)anthracene	13	UG/L	U	U		13	1
	Dibenzofuran	13	UG/L	U	U		13	1
	Diethyl phthalate	13	UG/L	U	U		13	1
	Dimethyl phthalate	13	UG/L	U	U		13	1
	Fluoranthene	13	UG/L	U	U		13	1
	Fluorene	13	UG/L	U	U		13	1
	Hexachlorobenzene	13	UG/L	U	U		13	1
	Hexachlorobutadiene	13	UG/L	U	U		13	1
	Hexachlorocyclopentadiene	13	UG/L	U	U		13	1
	Hexachloroethane	13	UG/L	U	U		13	1
	Indeno(1,2,3-cd)pyrene	13	UG/L	U	U		13	1
	Isophorone	13	UG/L	U	U		13	1
	N-Nitroso-di-n-propylamine	13	UG/L	U	U		13	1
	N-Nitrosodiphenylamine	13	UG/L	U	U		13	1
	Naphthalene	13	UG/L	U	U		13	1
	Nitrobenzene	13	UG/L	U	U		13	1
	Pentachlorophenol	25	UG/L	U	U		25	1
	Phenanthrene	13	UG/L	U	U		13	1
	Phenol	13	UG/L	U	U		13	1
	Pyrene	13	UG/L	U	U		13	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	UJ	G02	1	1
	1,1,2-Trichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1-Dichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1-Dichloroethene	1	UG/L	U	UJ	G02	1	1
	1,2-Dibromoethane	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloroethane	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloroethene	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloropropane	1	UG/L	U	UJ	G02	1	1
	2-Butanone	5	UG/L	U	UJ	G02	5	1
	2-Hexanone	5	UG/L	U	UJ	G02	5	1
	4-Methyl-2-pentanone	5	UG/L	U	UJ	G02	5	1
	Acetone	5	UG/L	U	UJ	G02,C05	5	1
	Benzene	1	UG/L	U	UJ	G02	1	1
	Bromochloromethane	1	UG/L	U	UJ	G02	1	1
	Bromodichloromethane	1	UG/L	U	UJ	G02	1	1
	Bromoform	1	UG/L	U	UJ	G02	1	1
	Bromomethane	1	UG/L	U	UJ	G02	1	1
	Carbon disulfide	1	UG/L	J	UJ	G02,F03, F06	1	1
	Carbon tetrachloride	1	UG/L	U	UJ	G02	1	1
	Chlorobenzene	1	UG/L	U	UJ	G02	1	1
	Chloroethane	1	UG/L	U	UJ	G02	1	1
	Chloroform	1	UG/L	U	UJ	G02	1	1
	Chloromethane	1	UG/L	U	UJ	G02	1	1
	cis-1,3-Dichloropropene	1	UG/L	U	UJ	G02	1	1
	Dibromochloromethane	1	UG/L	U	UJ	G02	1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-014
Sample ID: RQ0153 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	UJ	G02	1	1
	Ethylbenzene	1	UG/L	U	UJ	G02	1	1
	Methylene chloride	2.1	UG/L	B	UJ	G02,F01, F07	1	1
	Styrene	1	UG/L	U	UJ	G02	1	1
	Tetrachloroethene	1	UG/L	U	UJ	G02	1	1
	Toluene	1	UG/L	U	UJ	G02	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	UJ	G02	1	1
	Trichloroethene	1	UG/L	U	UJ	G02	1	1
	Vinyl chloride	1	UG/L	U	UJ	G02	1	1

Station: RQLmw-015
Sample ID: RQ0154 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	U		0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	24.5	UG/L		U	F01,F07	5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	0.35	UG/L	U	U		0.35	1
	Barium	2	UG/L		=		0.099	1
	Beryllium	0.031	UG/L	B	J		0.025	1
	Cadmium	0.18	UG/L	U	U		0.18	1
	Calcium	18500	UG/L		=		33.9	1
	Chromium	1.1	UG/L	U	U		1.1	1
	Cobalt	0.88	UG/L		=		0.015	1
	Copper	4.2	UG/L		U	F01,F07	0.045	1
	Iron	23.2	UG/L	B	U	F01,F06	8.8	1
	Lead	0.43	UG/L	B	J		0.2	1
	Magnesium	8770	UG/L		=		6.5	1
	Manganese	854	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	13.3	UG/L		=		0.28	1
	Potassium	1290	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	915	UG/L		=		56	1
	Thallium	0.24	UG/L		U	F01,F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	115	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDE	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDT	0.06	UG/L	U	UJ	A01	0.06	1
	Aldrin	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-BHC	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	beta-BHC	0.06	UG/L	U	UJ	A01,P01	0.06	1
	delta-BHC	0.06	UG/L	U	UJ	A01,P02	0.06	1
	Dieldrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan I	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan II	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan sulfate	0.06	UG/L	U	UJ	A01	0.06	1

Station: RQLmw-015
Sample ID: RQ0154 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin aldehyde	0.06	UG/L	U	UJ	A01,P01	0.06	1
	Endrin ketone	0.06	UG/L	U	UJ	A01	0.06	1
	gamma-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor epoxide	0.06	UG/L	U	UJ	A01	0.06	1
	Lindane	0.06	UG/L	U	UJ	A01	0.06	1
	Methoxychlor	0.06	UG/L	U	UJ	A01	0.06	1
SW846 8082	PCB-1016	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1221	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1232	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1242	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1248	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1254	1.5	UG/L	U	UJ	A01	1.5	1
	PCB-1260	1.5	UG/L	U	UJ	A01	1.5	1
SW846 8081A	Toxaphene	1.2	UG/L	U	UJ	A01	1.2	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	12	UG/L	U	U		12	1
	1,2-Dichlorobenzene	12	UG/L	U	U		12	1
	1,3-Dichlorobenzene	12	UG/L	U	U		12	1
	1,4-Dichlorobenzene	12	UG/L	U	U		12	1
	2,4,5-Trichlorophenol	12	UG/L	U	U		12	1
	2,4,6-Trichlorophenol	12	UG/L	U	U		12	1
	2,4-Dichlorophenol	12	UG/L	U	U		12	1
	2,4-Dimethylphenol	12	UG/L	U	U		12	1
	2,4-Dinitrophenol	24	UG/L	U	U		24	1
	2,4-Dinitrotoluene	12	UG/L	U	U		12	1
	2,6-Dinitrotoluene	12	UG/L	U	U		12	1
	2-Chloronaphthalene	12	UG/L	U	U		12	1
	2-Chlorophenol	12	UG/L	U	U		12	1
	2-Methyl-4,6-dinitrophenol	24	UG/L	U	U		24	1
	2-Methylnaphthalene	12	UG/L	U	U		12	1
	2-Methylphenol	12	UG/L	U	U		12	1
	2-Nitrobenzenamine	12	UG/L	U	U		12	1
	2-Nitrophenol	12	UG/L	U	U		12	1
	3,3'-Dichlorobenzidine	24	UG/L	U	U		24	1
	3-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Bromophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Chloro-3-methylphenol	12	UG/L	U	U		12	1
	4-Chlorobenzenamine	12	UG/L	U	U		12	1
	4-Chlorophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Methylphenol	12	UG/L	U	U		12	1
	4-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Nitrophenol	24	UG/L	U	U		24	1
	Acenaphthene	12	UG/L	U	U		12	1
	Acenaphthylene	12	UG/L	U	U		12	1
	Anthracene	12	UG/L	U	U		12	1
	Benz(a)anthracene	12	UG/L	U	U		12	1
	Benzenemethanol	12	UG/L	U	U		12	1
	Benzo(a)pyrene	12	UG/L	U	U		12	1
	Benzo(b)fluoranthene	12	UG/L	U	U		12	1
	Benzo(ghi)perylene	12	UG/L	U	U		12	1
	Benzo(k)fluoranthene	12	UG/L	U	U		12	1
	Benzoic acid	24	UG/L	U	U		24	1
	Bis(2-chloroethoxy)methane	12	UG/L	U	U		12	1

Station: RQLmw-015
Sample ID: RQ0154 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	12	UG/L	U	U		12	1
	Bis(2-chloroisopropyl) ether	12	UG/L	U	U		12	1
	Bis(2-ethylhexyl)phthalate	3.1	UG/L	J	J		12	1
	Butyl benzyl phthalate	12	UG/L	U	U		12	1
	Carbazole	12	UG/L	U	U		12	1
	Chrysene	12	UG/L	U	U		12	1
	Di-n-butyl phthalate	12	UG/L	U	U		12	1
	Di-n-octylphthalate	12	UG/L	U	U		12	1
	Dibenz(a,h)anthracene	12	UG/L	U	U		12	1
	Dibenzofuran	12	UG/L	U	U		12	1
	Diethyl phthalate	12	UG/L	U	U		12	1
	Dimethyl phthalate	12	UG/L	U	U		12	1
	Fluoranthene	12	UG/L	U	U		12	1
	Fluorene	12	UG/L	U	U		12	1
	Hexachlorobenzene	12	UG/L	U	U		12	1
	Hexachlorobutadiene	12	UG/L	U	U		12	1
	Hexachlorocyclopentadiene	12	UG/L	U	U		12	1
	Hexachloroethane	12	UG/L	U	U		12	1
	Indeno(1,2,3-cd)pyrene	12	UG/L	U	U		12	1
	Isophorone	12	UG/L	U	U		12	1
	N-Nitroso-di-n-propylamine	12	UG/L	U	U		12	1
	N-Nitrosodiphenylamine	12	UG/L	U	U		12	1
	Naphthalene	12	UG/L	U	U		12	1
	Nitrobenzene	12	UG/L	U	U		12	1
	Pentachlorophenol	24	UG/L	U	U		24	1
	Phenanthrene	12	UG/L	U	U		12	1
	Phenol	12	UG/L	U	U		12	1
	Pyrene	12	UG/L	U	U		12	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dibromoethane	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	UJ	C05	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromochloromethane	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	2.4	UG/L		U	F03,F07	1	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-015
Sample ID: RQ0154 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	2.1	UG/L	B	U	F01,F07	1	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1

Station: RQLmw-016
Sample ID: RQ0155 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	U		0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	U		0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	2-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	3-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	U		0.16	1
	4-Nitrotoluene	0.31	UG/L	U	U		0.31	1
	HMX	0.31	UG/L	U	U		0.31	1
	Nitrobenzene	0.16	UG/L	U	U		0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	P01	0.31	1
	Tetryl	0.31	UG/L	U	U		0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	24.8	UG/L		U	F01,F07	5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	0.94	UG/L	B	J		0.35	1
	Barium	11.2	UG/L		=		0.099	1
	Beryllium	0.025	UG/L	U	U		0.025	1
	Cadmium	0.18	UG/L	U	U		0.18	1
	Calcium	126000	UG/L		=		33.9	1
	Chromium	1.1	UG/L	U	U		1.1	1
	Cobalt	4.8	UG/L		=		0.015	1
	Copper	3.3	UG/L		U	F01,F07	0.045	1
	Iron	4880	UG/L		=		8.8	1
	Lead	0.25	UG/L	B	J		0.2	1
	Magnesium	19600	UG/L		=		6.5	1
	Manganese	2440	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	10	UG/L		=		0.28	1
	Potassium	3890	UG/L		=		20.6	1
	Selenium	0.41	UG/L	U	U		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	7140	UG/L		=		56	1
	Thallium	0.74	UG/L		U	F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	40.2	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.05	UG/L	U	UJ	A01	0.05	1
	4,4'-DDE	0.05	UG/L	U	UJ	A01	0.05	1
	4,4'-DDT	0.05	UG/L	U	UJ	A01	0.05	1
	Aldrin	0.05	UG/L	U	UJ	A01	0.05	1
	alpha-BHC	0.05	UG/L	U	UJ	A01	0.05	1
	alpha-Chlordane	0.05	UG/L	U	UJ	A01	0.05	1
	beta-BHC	0.05	UG/L	U	UJ	A01,P01	0.05	1
	delta-BHC	0.05	UG/L	U	UJ	A01,P02	0.05	1
	Dieldrin	0.05	UG/L	U	UJ	A01	0.05	1
	Endosulfan I	0.05	UG/L	U	UJ	A01	0.05	1
	Endosulfan II	0.05	UG/L	U	UJ	A01	0.05	1
	Endosulfan sulfate	0.05	UG/L	U	UJ	A01	0.05	1

Station: RQLmw-016
Sample ID: RQ0155 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.05	UG/L	U	UJ	A01	0.05	1
	Endrin aldehyde	0.05	UG/L	U	UJ	A01,P01	0.05	1
	Endrin ketone	0.05	UG/L	U	UJ	A01	0.05	1
	gamma-Chlordane	0.05	UG/L	U	UJ	A01	0.05	1
	Heptachlor	0.05	UG/L	U	UJ	A01	0.05	1
	Heptachlor epoxide	0.05	UG/L	U	UJ	A01	0.05	1
	Lindane	0.05	UG/L	U	UJ	A01	0.05	1
	Methoxychlor	0.05	UG/L	U	UJ	A01	0.05	1
SW846 8082	PCB-1016	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1221	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1232	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1242	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1248	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1254	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1260	1.2	UG/L	U	UJ	A01	1.2	1
SW846 8081A	Toxaphene	1	UG/L	U	UJ	A01	1	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	11	UG/L	U	U		11	1
	1,2-Dichlorobenzene	11	UG/L	U	U		11	1
	1,3-Dichlorobenzene	11	UG/L	U	U		11	1
	1,4-Dichlorobenzene	11	UG/L	U	U		11	1
	2,4,5-Trichlorophenol	11	UG/L	U	U		11	1
	2,4,6-Trichlorophenol	11	UG/L	U	U		11	1
	2,4-Dichlorophenol	11	UG/L	U	U		11	1
	2,4-Dimethylphenol	11	UG/L	U	U		11	1
	2,4-Dinitrophenol	21	UG/L	U	U		21	1
	2,4-Dinitrotoluene	11	UG/L	U	U		11	1
	2,6-Dinitrotoluene	11	UG/L	U	U		11	1
	2-Chloronaphthalene	11	UG/L	U	U		11	1
	2-Chlorophenol	11	UG/L	U	U		11	1
	2-Methyl-4,6-dinitrophenol	21	UG/L	U	U		21	1
	2-Methylnaphthalene	11	UG/L	U	U		11	1
	2-Methylphenol	11	UG/L	U	U		11	1
	2-Nitrobenzenamine	11	UG/L	U	U		11	1
	2-Nitrophenol	11	UG/L	U	U		11	1
	3,3'-Dichlorobenzidine	21	UG/L	U	U		21	1
	3-Nitrobenzenamine	11	UG/L	U	U		11	1
	4-Bromophenyl phenyl ether	11	UG/L	U	U		11	1
	4-Chloro-3-methylphenol	11	UG/L	U	U		11	1
	4-Chlorobenzenamine	11	UG/L	U	U		11	1
	4-Chlorophenyl phenyl ether	11	UG/L	U	U		11	1
	4-Methylphenol	11	UG/L	U	U		11	1
	4-Nitrobenzenamine	11	UG/L	U	U		11	1
	4-Nitrophenol	21	UG/L	U	U		21	1
	Acenaphthene	11	UG/L	U	U		11	1
	Acenaphthylene	11	UG/L	U	U		11	1
	Anthracene	11	UG/L	U	U		11	1
	Benz(a)anthracene	11	UG/L	U	U		11	1
	Benzenemethanol	11	UG/L	U	U		11	1
	Benzo(a)pyrene	11	UG/L	U	U		11	1
	Benzo(b)fluoranthene	11	UG/L	U	U		11	1
	Benzo(ghi)perylene	11	UG/L	U	U		11	1
	Benzo(k)fluoranthene	11	UG/L	U	U		11	1
	Benzoic acid	21	UG/L	U	U		21	1
	Bis(2-chloroethoxy)methane	11	UG/L	U	U		11	1

Station: RQLmw-016
Sample ID: RQ0155 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	11	UG/L	U	U		11	1
	Bis(2-chloroisopropyl) ether	11	UG/L	U	U		11	1
	Bis(2-ethylhexyl)phthalate	15	UG/L		=		11	1
	Butyl benzyl phthalate	11	UG/L	U	U		11	1
	Carbazole	11	UG/L	U	U		11	1
	Chrysene	11	UG/L	U	U		11	1
	Di-n-butyl phthalate	1.5	UG/L	J	J		11	1
	Di-n-octylphthalate	11	UG/L	U	U		11	1
	Dibenz(a,h)anthracene	11	UG/L	U	U		11	1
	Dibenzofuran	11	UG/L	U	U		11	1
	Diethyl phthalate	11	UG/L	U	U		11	1
	Dimethyl phthalate	11	UG/L	U	U		11	1
	Fluoranthene	11	UG/L	U	U		11	1
	Fluorene	11	UG/L	U	U		11	1
	Hexachlorobenzene	11	UG/L	U	U		11	1
	Hexachlorobutadiene	11	UG/L	U	U		11	1
	Hexachlorocyclopentadiene	11	UG/L	U	U		11	1
	Hexachloroethane	11	UG/L	U	U		11	1
	Indeno(1,2,3-cd)pyrene	11	UG/L	U	U		11	1
	Isophorone	11	UG/L	U	U		11	1
	N-Nitroso-di-n-propylamine	11	UG/L	U	U		11	1
	N-Nitrosodiphenylamine	11	UG/L	U	U		11	1
	Naphthalene	11	UG/L	U	U		11	1
	Nitrobenzene	11	UG/L	U	U		11	1
	Pentachlorophenol	21	UG/L	U	U		21	1
	Phenanthrene	11	UG/L	U	U		11	1
	Phenol	11	UG/L	U	U		11	1
	Pyrene	11	UG/L	U	U		11	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	U		1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	U		1	1
	1,1,2-Trichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethane	1	UG/L	U	U		1	1
	1,1-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dibromoethane	1	UG/L	U	U		1	1
	1,2-Dichloroethane	1	UG/L	U	U		1	1
	1,2-Dichloroethene	1	UG/L	U	U		1	1
	1,2-Dichloropropane	1	UG/L	U	U		1	1
	2-Butanone	5	UG/L	U	U		5	1
	2-Hexanone	5	UG/L	U	U		5	1
	4-Methyl-2-pentanone	5	UG/L	U	U		5	1
	Acetone	5	UG/L	U	UJ	C05	5	1
	Benzene	1	UG/L	U	U		1	1
	Bromochloromethane	1	UG/L	U	U		1	1
	Bromodichloromethane	1	UG/L	U	U		1	1
	Bromoform	1	UG/L	U	U		1	1
	Bromomethane	1	UG/L	U	U		1	1
	Carbon disulfide	1.8	UG/L		U	F03,F07	1	1
	Carbon tetrachloride	1	UG/L	U	U		1	1
	Chlorobenzene	1	UG/L	U	U		1	1
	Chloroethane	1	UG/L	U	U		1	1
	Chloroform	1	UG/L	U	U		1	1
	Chloromethane	1	UG/L	U	U		1	1
	cis-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Dibromochloromethane	1	UG/L	U	U		1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-016
Sample ID: RQ0155 **Media:** Groundwater
Date Collected: 05/21/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	U		1	1
	Ethylbenzene	1	UG/L	U	U		1	1
	Methylene chloride	1.9	UG/L	B	U	F01,F07	1	1
	Styrene	1	UG/L	U	U		1	1
	Tetrachloroethene	1	UG/L	U	U		1	1
	Toluene	1	UG/L	U	U		1	1
	trans-1,3-Dichloropropene	1	UG/L	U	U		1	1
	Trichloroethene	1	UG/L	U	U		1	1
	Vinyl chloride	1	UG/L	U	U		1	1

Station: RQLmw-017
Sample ID: RQ0156 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Cyanide	**GPL**							
SW846 9014	Cyanide	0.005	MG/L	U	U		0.005	1
Explosives	**GPL**							
SW846 8330	1,3,5-Trinitrobenzene	0.16	UG/L	U	UJ	G02	0.16	1
	1,3-Dinitrobenzene	0.16	UG/L	U	UJ	C08,G02	0.16	1
	2,4,6-Trinitrotoluene	0.16	UG/L	U	UJ	G02,P02	0.16	1
	2,4-Dinitrotoluene	0.16	UG/L	U	UJ	G02	0.16	1
	2,6-Dinitrotoluene	0.16	UG/L	U	UJ	G02	0.16	1
	2-Amino-4,6-Dinitrotoluene	0.16	UG/L	U	UJ	G02	0.16	1
	2-Nitrotoluene	0.31	UG/L	U	UJ	G02	0.31	1
	3-Nitrotoluene	0.31	UG/L	U	UJ	G02	0.31	1
	4-Amino-2,6-Dinitrotoluene	0.16	UG/L	U	UJ	G02	0.16	1
	4-Nitrotoluene	0.31	UG/L	U	UJ	G02	0.31	1
	HMX	0.31	UG/L	U	UJ	G02	0.31	1
	Nitrobenzene	0.16	UG/L	U	UJ	G02	0.16	1
SW846 9056	Nitrocellulose	0.179	MG/L	U	UJ	A03,H03	0.179	1
SW846 8330	Nitroglycerin	16	UG/L	U	U		16	1
	Nitroguanidine	10	UG/L	U	UJ	A01	10	1
	RDX	0.31	UG/L	U	UJ	G02,P01	0.31	1
	Tetryl	0.31	UG/L	U	UJ	G02	0.31	1
Filtered Inorganics	**GPL**							
SW846 6010B	Aluminum	11400	UG/L		=		5.6	1
	Antimony	1	UG/L	U	U	F10	1	1
	Arsenic	0.35	UG/L	U	U		0.35	1
	Barium	12.5	UG/L		=		0.099	1
	Beryllium	2.7	UG/L		=		0.025	1
	Cadmium	1.5	UG/L		=		0.18	1
	Calcium	43500	UG/L		=		33.9	1
	Chromium	4.8	UG/L		=		1.1	1
	Cobalt	53.3	UG/L		=		0.015	1
	Copper	8.3	UG/L		U	F03,F07	0.045	1
	Iron	3060	UG/L		=		8.8	1
	Lead	3.6	UG/L		=		0.2	1
	Magnesium	13300	UG/L		=		6.5	1
	Manganese	7080	UG/L		=		0.44	1
SW846 7470A	Mercury	0.1	UG/L	U	U		0.1	1
SW846 6010B	Nickel	136	UG/L		=		0.28	1
	Potassium	3270	UG/L		=		20.6	1
	Selenium	0.47	UG/L	B	J		0.41	1
	Silver	0.38	UG/L	U	U		0.38	1
	Sodium	4990	UG/L		=		56	1
	Thallium	0.42	UG/L		U	F01,F07	0.059	1
	Vanadium	1.6	UG/L	U	U		1.6	1
	Zinc	781	UG/L	E	J	E07	0.2	1
Pesticides and PCBs	**GPL**							
SW846 8081A	4,4'-DDD	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDE	0.06	UG/L	U	UJ	A01	0.06	1
	4,4'-DDT	0.06	UG/L	U	UJ	A01	0.06	1
	Aldrin	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-BHC	0.06	UG/L	U	UJ	A01	0.06	1
	alpha-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	beta-BHC	0.06	UG/L	U	UJ	A01,P01	0.06	1
	delta-BHC	0.06	UG/L	U	UJ	A01,P02	0.06	1
	Dieldrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan I	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan II	0.06	UG/L	U	UJ	A01	0.06	1
	Endosulfan sulfate	0.06	UG/L	U	UJ	A01	0.06	1

Ramsdell Quarry Phase I RI

Station: RQLmw-017
Sample ID: RQ0156 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Pesticides and PCBs	**GPL**							
SW846 8081A	Endrin	0.06	UG/L	U	UJ	A01	0.06	1
	Endrin aldehyde	0.06	UG/L	U	UJ	A01,P01	0.06	1
	Endrin ketone	0.06	UG/L	U	UJ	A01	0.06	1
	gamma-Chlordane	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor	0.06	UG/L	U	UJ	A01	0.06	1
	Heptachlor epoxide	0.06	UG/L	U	UJ	A01	0.06	1
	Lindane	0.06	UG/L	U	UJ	A01	0.06	1
	Methoxychlor	0.06	UG/L	U	UJ	A01	0.06	1
SW846 8082	PCB-1016	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1221	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1232	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1242	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1248	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1254	1.2	UG/L	U	UJ	A01	1.2	1
	PCB-1260	1.2	UG/L	U	UJ	A01	1.2	1
SW846 8081A	Toxaphene	1.2	UG/L	U	UJ	A01	1.2	1
Semi-Volatile Organics	**GPL**							
SW846 8270C	1,2,4-Trichlorobenzene	12	UG/L	U	U		12	1
	1,2-Dichlorobenzene	12	UG/L	U	U		12	1
	1,3-Dichlorobenzene	12	UG/L	U	U		12	1
	1,4-Dichlorobenzene	12	UG/L	U	U		12	1
	2,4,5-Trichlorophenol	12	UG/L	U	U		12	1
	2,4,6-Trichlorophenol	12	UG/L	U	U		12	1
	2,4-Dichlorophenol	12	UG/L	U	U		12	1
	2,4-Dimethylphenol	12	UG/L	U	U		12	1
	2,4-Dinitrophenol	24	UG/L	U	U		24	1
	2,4-Dinitrotoluene	12	UG/L	U	U		12	1
	2,6-Dinitrotoluene	12	UG/L	U	U		12	1
	2-Chloronaphthalene	12	UG/L	U	U		12	1
	2-Chlorophenol	12	UG/L	U	U		12	1
	2-Methyl-4,6-dinitrophenol	24	UG/L	U	U		24	1
	2-Methylnaphthalene	12	UG/L	U	U		12	1
	2-Methylphenol	12	UG/L	U	U		12	1
	2-Nitrobenzenamine	12	UG/L	U	U		12	1
	2-Nitrophenol	12	UG/L	U	U		12	1
	3,3'-Dichlorobenzidine	24	UG/L	U	U		24	1
	3-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Bromophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Chloro-3-methylphenol	12	UG/L	U	U		12	1
	4-Chlorobenzenamine	12	UG/L	U	U		12	1
	4-Chlorophenyl phenyl ether	12	UG/L	U	U		12	1
	4-Methylphenol	12	UG/L	U	U		12	1
	4-Nitrobenzenamine	12	UG/L	U	U		12	1
	4-Nitrophenol	24	UG/L	U	U		24	1
	Acenaphthene	12	UG/L	U	U		12	1
	Acenaphthylene	12	UG/L	U	U		12	1
	Anthracene	12	UG/L	U	U		12	1
	Benz(a)anthracene	12	UG/L	U	U		12	1
	Benzenemethanol	12	UG/L	U	U		12	1
	Benzo(a)pyrene	12	UG/L	U	U		12	1
	Benzo(b)fluoranthene	12	UG/L	U	U		12	1
	Benzo(ghi)perylene	12	UG/L	U	U		12	1
	Benzo(k)fluoranthene	12	UG/L	U	U		12	1
	Benzoic acid	24	UG/L	U	U		24	1
	Bis(2-chloroethoxy)methane	12	UG/L	U	U		12	1

Ramsdell Quarry Phase I RI

Station: RQLmw-017
Sample ID: RQ0156 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Semi-Volatile Organics	**GPL**							
SW846 8270C	Bis(2-chloroethyl) ether	12	UG/L	U	U		12	1
	Bis(2-chloroisopropyl) ether	12	UG/L	U	U		12	1
	Bis(2-ethylhexyl)phthalate	9.5	UG/L	J	J		12	1
	Butyl benzyl phthalate	12	UG/L	U	U		12	1
	Carbazole	12	UG/L	U	U		12	1
	Chrysene	12	UG/L	U	U		12	1
	Di-n-butyl phthalate	1.7	UG/L	J	J		12	1
	Di-n-octylphthalate	12	UG/L	U	U		12	1
	Dibenz(a,h)anthracene	12	UG/L	U	U		12	1
	Dibenzofuran	12	UG/L	U	U		12	1
	Diethyl phthalate	12	UG/L	U	U		12	1
	Dimethyl phthalate	12	UG/L	U	U		12	1
	Fluoranthene	12	UG/L	U	U		12	1
	Fluorene	12	UG/L	U	U		12	1
	Hexachlorobenzene	12	UG/L	U	U		12	1
	Hexachlorobutadiene	12	UG/L	U	U		12	1
	Hexachlorocyclopentadiene	12	UG/L	U	U		12	1
	Hexachloroethane	12	UG/L	U	U		12	1
	Indeno(1,2,3-cd)pyrene	12	UG/L	U	U		12	1
	Isophorone	12	UG/L	U	U		12	1
	N-Nitroso-di-n-propylamine	12	UG/L	U	U		12	1
	N-Nitrosodiphenylamine	12	UG/L	U	U		12	1
	Naphthalene	12	UG/L	U	U		12	1
	Nitrobenzene	12	UG/L	U	U		12	1
	Pentachlorophenol	24	UG/L	U	U		24	1
	Phenanthrene	12	UG/L	U	U		12	1
	Phenol	12	UG/L	U	U		12	1
	Pyrene	12	UG/L	U	U		12	1
Volatile Organics	**GPL**							
SW846 8260B	1,1,1-Trichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1,2,2-Tetrachloroethane	1	UG/L	U	UJ	G02	1	1
	1,1,2-Trichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1-Dichloroethane	1	UG/L	U	UJ	G02	1	1
	1,1-Dichloroethene	1	UG/L	U	UJ	G02	1	1
	1,2-Dibromoethane	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloroethane	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloroethene	1	UG/L	U	UJ	G02	1	1
	1,2-Dichloropropane	1	UG/L	U	UJ	G02	1	1
	2-Butanone	5	UG/L	U	UJ	G02	5	1
	2-Hexanone	5	UG/L	U	UJ	G02	5	1
	4-Methyl-2-pentanone	5	UG/L	U	UJ	G02	5	1
	Acetone	5	UG/L	U	UJ	G02,C05	5	1
	Benzene	1	UG/L	U	UJ	G02	1	1
	Bromochloromethane	1	UG/L	U	UJ	G02	1	1
	Bromodichloromethane	1	UG/L	U	UJ	G02	1	1
	Bromoform	1	UG/L	U	UJ	G02	1	1
	Bromomethane	1	UG/L	U	UJ	G02	1	1
	Carbon disulfide	1.2	UG/L		UJ	G02,F03, F07	1	1
	Carbon tetrachloride	1	UG/L	U	UJ	G02	1	1
	Chlorobenzene	1	UG/L	U	UJ	G02	1	1
	Chloroethane	1	UG/L	U	UJ	G02	1	1
	Chloroform	1	UG/L	U	UJ	G02	1	1
	Chloromethane	1	UG/L	U	UJ	G02	1	1
	cis-1,3-Dichloropropene	1	UG/L	U	UJ	G02	1	1
	Dibromochloromethane	1	UG/L	U	UJ	G02	1	1

Ramsdell Quarry Phase I RI

Station: RQLmw-017
Sample ID: RQ0156 **Media:** Groundwater
Date Collected: 05/19/2004 **Field Sample Type:** Grab

Analysis	Chemical	Result	Units	Lab Qual	Data Qual	Validation Code	Detection Limit	Dilution
Volatile Organics	**GPL**							
SW846 8260B	Dimethylbenzene	1	UG/L	U	UJ	G02	1	1
	Ethylbenzene	1	UG/L	U	UJ	G02	1	1
	Methylene chloride	1.8	UG/L	B	UJ	G02,F01, F07	1	1
	Styrene	1	UG/L	U	UJ	G02	1	1
	Tetrachloroethene	1	UG/L	U	UJ	G02	1	1
	Toluene	1	UG/L	U	UJ	G02	1	1
	trans-1,3-Dichloropropene	1	UG/L	U	UJ	G02	1	1
	Trichloroethene	1	UG/L	U	UJ	G02	1	1
	Vinyl chloride	1	UG/L	U	UJ	G02	1	1

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COC NO.: RQGPE - HF01
page 1 of 1

CHAIN OF CUSTODY RECORD

PROJECT NAME: Ramsdell Quarry Phase I RI

DELIVERY ORDER NUMBER: CY11

PROJECT MANAGER: Kevin Jago 865-481-4814

Sampler (Signature): Kelly Milner (Printed Name)

REQUESTED PARAMETERS

LABORATORY NAME: GPL Environmental

LABORATORY ADDRESS: 202 Perry Parkway, Gaithersburg, MD 20877, Attn: Amy Friedlander

PHONE NO: 301-926-5802

Sample ID	Date Collected	Time Collected	Matrix	VOCs	SVOCs	Pesticides /PCBs	Explosives	Propellants	Metals	Cyanide	Filtered Metals	SVOCs/Pesticides/PCBs	Metals and Cyanide	No. of Containers	
RQ0175	5/19/04	0825	W	3											TB
RQ0167	5/19/04	0825	W	3		2		2		1					RINSEATE
RQ0152	5/19/04	1215	W	3		2		2		1					
RQ0159	5/19/04	1215	W	3		2		2		1					
~~RQ0162~~	~~5/19/04~~	~~1215~~	~~W~~	~~3~~		~~2~~		~~2~~		~~1~~					
RQ0153	5/19/04	1400	W	6		4		4	2	2					MS/MSD
RQ0151	5/20/04	1120	W	3		2		2		1					

RELINQUISHED BY: Kelly Milner	Date/Time 5/20/04 1700	RECEIVED BY:	Date/Time 5-21-04 14:15	TOTAL NUMBER OF	Cooler Temperature: 4°C
COMPANY NAME: SAIC		COMPANY NAME:		Cooler ID: GPL1-6	FEDEX NUMBER: 7926 4322 1459
RECEIVED BY:	Date/Time	RELINQUISHED BY:	Date/Time		7926 4322 1470
COMPANY NAME:		COMPANY NAME:			7926 4322 1481
RELINQUISHED BY:	Date/Time	RECEIVED BY:	Date/Time		7926 4322 1507
COMPANY NAME:		COMPANY NAME:			7926 4322 1578
				405154	7926 4322 1540

GPL Laboratories, LLLP
7210A Corporate CT, Frederick, MD 21703
Tel. (301)694-5310 Fax (301)620-0731
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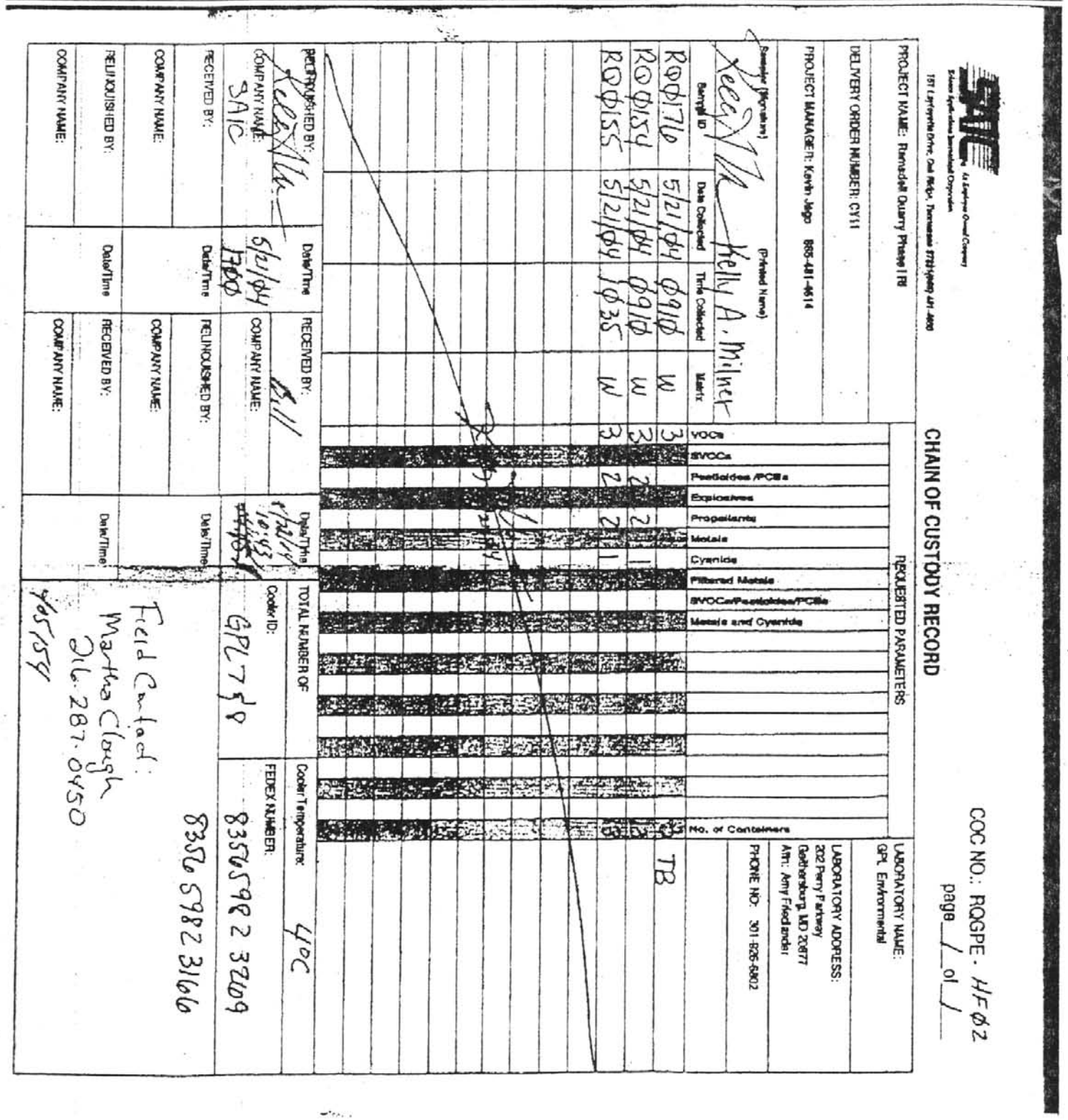

CHAIN OF CUSTODY RECORD

COC NO.: RQGPE - HF02

page 1 of 1

PROJECT NAME: Ramsdell Quarry Phase I RI

DELIVERY ORDER NUMBER: CY11

PROJECT MANAGER: Kevin Jago 865-481-4614

Sampler (Signature): Kelly A. Milner

(Printed Name)

Sample ID	Date Collected	Time Collected	Matrix	No. of Containers	Filtered Metals	Metals and Cyanide
RQ0176	5/21/04	0910	W	3		
RQ0154	5/21/04	0910	W	3		
RQ0155	5/21/04	1035	W	3		

REQUESTED PARAMETERS: VOCs; SVOCs; Pesticides/PCBs; Explosives; Propellants; Metals; Cyanide; Filtered Metals; SVOCs/Pesticides/PCBs; Metals and Cyanide; No. of Containers

LABORATORY NAME: GPL Environmental

LABORATORY ADDRESS: 202 Perry Parkway, Gaithersburg, MD 20877

Attn: Amy Friedlander

PHONE NO: 301-926-8802

TB

RELINQUISHED BY: Kelly A. Milner — Date/Time: 5/21/04 1700

COMPANY NAME: SAIC

RECEIVED BY: — Date/Time: 5/21/04 1710

COMPANY NAME: GPL

RELINQUISHED BY: — Date/Time: 5/21/04 1845

COMPANY NAME:

RECEIVED BY: — Date/Time:

COMPANY NAME:

RELINQUISHED BY: — Date/Time:

COMPANY NAME:

RECEIVED BY: — Date/Time:

COMPANY NAME:

TOTAL NUMBER OF Coolers ID: GPL 758

Cooler Temperature: 4°C

FEDEX NUMBER: 835059823209

835059823160

Field Contact:
Martha Clough
216.287.0450

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Comment Responses for Final
Phase I Remedial Investigation May 2004 Follow-On Groundwater Sampling at the Ramsdell Quarry Landfill at the Ravenna Army Ammunition Plant, Ravenna, Ohio
Comment Response Table
Rev. 3/16/05

Comment Number	Page or Sheet	Comment	Recommendation	Response
		Ohio EPA DDAGW (C. McCambridge, T. Fisher)		
1.	Section 3.1, Table 3-1, Figure 3-1, pg. 3-2	Issue 1: There is a discrepancy between the ground water elevations for RQLmw-017 in Table 3-1 (967.94) and Figure 3-1 (967.99).	Issue 1: Please correct the discrepancy.	Issue 1: Agree. 967.94 is correct. The figure has been revised to correct the typo.
		Issue 2: Most of the ground water sampling logs found in Appendix A did not contain ground water elevations for sampled wells (i.e., samples RQ0153, RQ0151, sample #? From RQLmw-017).	Issue 2: Please provide the field data sheets detailing ground water elevation information on wells which samples were collected from.	Issue 2: Clarification. Contemporaneous water level elevations were recorded on May 19, 2004, prior to any sampling in the Field Manager's logbook rather than in the sampling logbook. As part of the QA process, additional details have been added and the sheet included. Steps have been taken to ensure that the information is recorded in the correct location in future field efforts.
		Issue 3: Figure 3.1 does not contain arrows illustrating the inferred ground water flow direction. Only surface drainage direction arrows have been added.	Issue 3: Add arrows to illustrate the inferred ground water flow direction.	Issue 3: Agree. Arrows showing inferred groundwater flow direction have been added to this figure.
		Issue 4: The text does not state whether ground water elevations were measured before purging or sampling.	Issue 4: Please provide additional details concerning this issue.	Issue 4: Agree. The text states that, "Groundwater samples were collected from each of the six Phase I RI monitoring wells following AOC-wide water-level measurements." However, additional text has been added to Chapter 3.0 to make this clearer to the reader.

Comment Responses for Final
Phase I Remedial Investigation May 2004 Follow-On Groundwater Sampling at the Ramsdell Quarry Landfill at the Ravenna Army Ammunition Plant, Ravenna, Ohio
Comment Response Table
Rev. 3/16/05

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2.	Section 3.3, Table 3.2, pg. 3-4	This table indicates that the summary statistics were only compared with site background criteria. This data was not compared with MCLs	Revise this table to ensure that MCLs are listed in addition to site background criteria.	Clarification. Table 3.2 compares results to both site background and PRGs; however, columns comparing the results to MCLs (primary and secondary) have been added as requested.
3.	Section 3.3, Table 3-3, pg. 3-5.	Table 3-3 provided no explanation for the various symbols (=, *, U, and J) used as data qualifiers	Provide an explanation of the symbols used in Table 3-3 for clarification.	Agree. Footnotes defining the symbols used as data qualifiers have been added to the table.
4.	Appendix A Well Sampling Logs	Issue 1: Water table elevations were not recorded on the field data sheets that are included in the submittal. Issue 2: During the Phase I groundwater sampling activities, final turbidity readings of > 5 NTUs were noted on the sampling logs of the following monitoring well locations: RQLmw-013, RQLmw-014, RQLmw-015, RQLmw-016, and RQLmw-017. The reasons for these elevated turbidity readings are not discussed or explained in the submittal.	Issue 1: Please provide the field data sheets recording the water table elevations for this sampling event (May 2004) Issue 2: Provide a discussion concerning the measurement of turidity and the procedures that were implemented to obtain representative groundwater samples	Issue 1: See response to Comment 1, Issue 2. Issue 2: Clarification. These wells were developed in accordance with work plan specifications to obtain the lowest turbidity readings possible. Micropurge sampling methods were employed for wells where possible (recharge rates were too slow at RQLmw-015, -016, and -017). Despite these measures, turbidity levels remained above 5 NTUs in most wells. Accordingly, only filtered metals samples were obtained. Text has been added with this discussion.

Comment Responses for Final
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Comment Response Table
Rev. 3/16/05

Comment Number	Page or Sheet	Comment	Recommendation	Response
		Issue 3: On the well sampling sheet for RQLmw-017, pH values of 3.13 (initial reading) and 3.68 (final reading) were noted. A pH value of 3.95 was recorded during the purging activities of RQLmw-102. No explanation for these low pH readings was given in the text.	Issue 3: Were low pH values noted at this monitoring well location during prior sampling events? Please provide a discussion concerning these low pH readings from RQLmw-017.	Issue 3: Clarification. In December 2003, both RQLmw-012 and -013 had low pH readings (3.8 to 3.9), while RQLmw-017 was in the slightly acidic to normal (5 to 6 pH) range. The reason for this is not known. Text has been added to discuss this observation.
5.	Appendix B	The analytical results section does not contain the chain of custody forms for the May 2004 groundwater sampling event.	Please insert the completed chain of custody forms of the May 2004 sampling event in the revised document.	Agree. COCs have been added.